Santa Clara Valley Water District

Fiscal Years 2017-21
Capital Improvement Plan

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May 10, 2016

Santa Clara Valley
Water District

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Overview

OVERVIEW

The Santa Clara Valley Water District's (District) Fiscal Year 2017-21 Five-Year Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects from Fiscal Year 2016-17 through Fiscal Year 2020-21. The purpose of the CIP is to document planned District projects to help integrate District work with the larger community by aligning District planning with other local agency planning efforts.

The District's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within the District boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water related infrastructure to meet the needs of Santa Clara County.

SANTA CLARA VALLEY WATER

Mission

The mission of the district is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officer Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and Public Contract Code definition of public works. They exceed $50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories.

1. Acquisition of land for public purpose
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building
3. Addition to or expansion of an existing facility
4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than $50,000
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than $1.5 million
2. Project can be completed within 2 fiscal years
3. Rights-of-Way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Almaden Campus Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by the District that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of computers, vehicles and large equipment.

Overview

ALIGNMENT WITH ENDS POLICIES

The District plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under the District's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by District staff. Balancing the Ends Policies are the Executive Limitations, which set limits on staff activities in fulfilling the Ends.

Program plans or master plans are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operation staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Appendix E contains the project feasibility studies that are currently underway. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures the District's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP.

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations.
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
  - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
  - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

CIP PLANNING PROCESS

The District conducts an annual planning process for its Capital Improvement Program. The purpose of the planning process is to ensure the capital projects included in the CIP:

- meet the Board's priorities and contribute to the objectives of the District's various programs
- have identified funding for the duration of the projects
- are coordinated with the local jurisdiction's General Plans.

The CIP planning process is carried out in accordance with the following Executive Limitations.

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are alligned with the Board's capital priorities."

The annual CIP process is the responsibility of the CIP Committee comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution
- Prioritization of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities
- Financial analysis, to determine the capacity of the District's capital funding sources to fund the proposed capital projects

- Outreach to local jurisdictions within Santa Clara County, to coordinate the District's Capital Improvement Program with their General Plans
- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities
- Board adoption of the CIP plan

The annual CIP planning process starts with collecting information on proposed new capital projects in July, followed by preliminary scoping, priority and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, together with other long-term planning efforts of the District, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP is being reviewed by the cities and County the budget is being reviewed and finalized. The Board concludes the outreach on the CIP with a public hearing. The first year of the CIP is reconciled with the budget and the two documents are presented to the board for formal adoption in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the Capital Improvement Program. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board on three separate occasions for review and input. Early in the process the project list is presented to the board so they can provide direction to staff, ensuring that the document is developed in accordance with board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. The CIP is adopted by the Board in May following a public hearing.

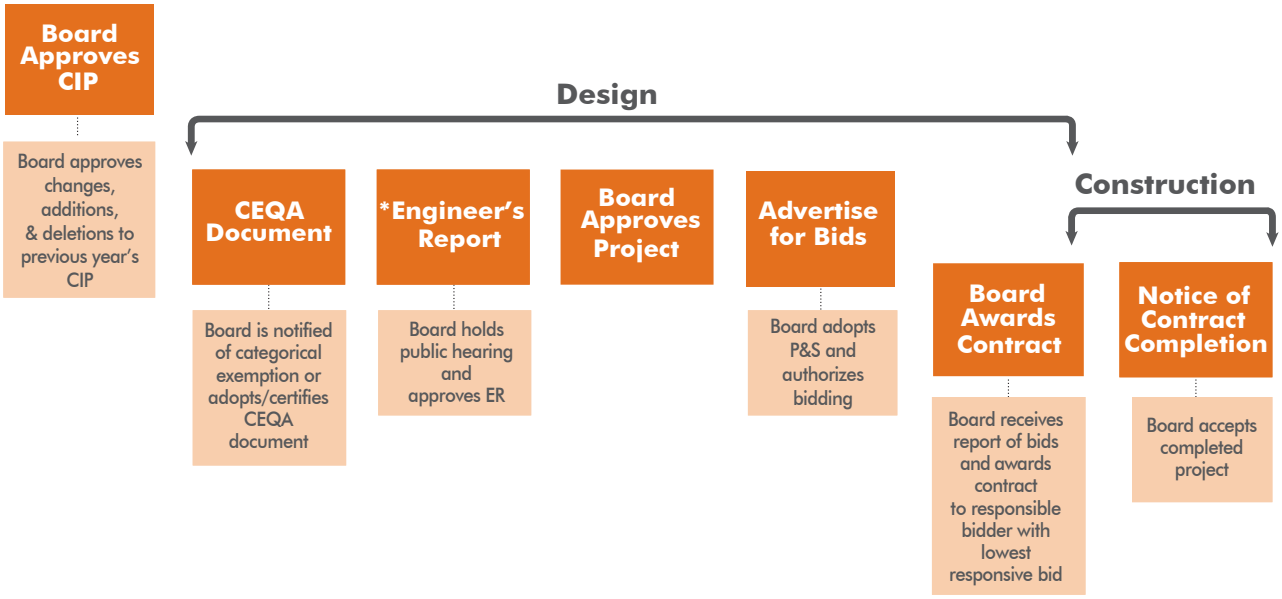
On January 12, 2016 the FY 2017-21 project list and prioritization criteria were reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2017-21 CIP:

- To fully fund the Water Supply projects in the FY 2017-21 CIP, an increase in the groundwater production charges of 19.9% in North County and 10.4% for South County will be required.
- Four new projects with a combined cost of $198 million were added to the CIP. They are; Coyote Pumping Plant ASD Replacement, 10-Year Pipeline Rehabilitation, Penitencia Water Treatment Plant Residuals Management, and Erosion Repair Program.
- The proposed PureWater Silicon Valley Program components have been fully incorporated in the FY 2017-21 CIP. Using a 2014 initial cost estimate of $800M for this Program and applying cost escalation factors, the current Program cost estimate is $945M. In previous 5-year CIPs, a placeholder cost of about $500M-$600M had been used for this Program. The updated $945M Program cost is a $370M increase from the current CIP. Board decisions on how to proceed with this project will be incorporated into future CIPs as they are made. Changes to a project of this size will have a significant effect on the overall cost of the CIP.
- The Erosion Repair Program was added to the FY 2017-21 CIP. More than 30 erosion sites along District-owned portions of creeks throughout the county have been identified. The current plan is to fund only a portion of the identified sites in the FY 2017-21 CIP.

Overview

Each project in the CIP goes through a planning phase, design phase and construction phase. The Board may determine to not implement a project based on various considerations such as financial constraints, environmental impacts or community desire during a project's planning or design phases. Approval of a capital project by the Board occurs at the end of the design phase when the Board approves the plans and specifications to solicit bids for construction of the project.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



** Board approval of the Engineer's Report is required only on projects with zone funding.*

Rinconada Water Treatment Plant Residuals Management

CIP PROCESS ALIGNMENT WITH ENDS POLICIES

Ends Policy E-2
There is a reliable, clean water supply for current and future generations.

→

Program Plans or Master Plans
- **1990** SCVWD Action Plan for reducing disinfection by-product (Board approved)
- Integrated Water Resource Plan (Board Work Studies)
- **1999** Producer-Wholesaler Agreement for Supply of Recycled Water between SCRWA and the District (Board approved)
- **2004** Santa Clara Valley Water District Asset Management Program Implementation Plan
- **2005** Urban Water Management Plan (Board approved)
- **2005** Dam Safety Plan
- **2005** Water Infrastructure Reliability Plan
- **2006** South County Water Recycling MasterPlan (Board approved)
- **2012** Safe, Clean Water Program (Board/Voter approved)
- **2012** Water Supply Infrastructure Master Plan (Board approved)
- **2013** Recycled Water Master Plan (City of Sunnyvale)
- **2014** South Bay Water Recycling Strategic Master Plan

→

FY 2017-2021 CIP
- **30 - Water Supply Capital Projects**

Ends Policy E-3.1 & E-3.2
Provide natural flood protection for residents, businesses, and visitors. Reduce potential for flood damages.

→

Program Plans or Master Plans
- **1982, 1986, 1990** Benefit Assessment Program (Board approved)
- **2000** Clean, Safe Creek Program (Board/Voter approved)
- **2001** Stream Maintenance Program (Board approved) Annual Watershed Facility Inspection Program (for all watersheds)
- Feasibility Cost Sharing Agreements with the US Army Corps of Engineers
- **2012** Safe, Clean Water Program (Board/Voter approved)

→

FY 2017-2021 CIP
- **19 - Flood Protection Capital Projects**

Ends Policy E-4
There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County.

→

Program Plans or Master Plans
- CEQA commitments
- Regulatory permitting commitments
- Enhancement Program per Clean Safe Creeks Program (Board/Voter approved)
- Enhancement opportunities determined appropriate by the Board
  - Fish and Aquatic Habitat Collaborative Effort
  - Natural Resource Damage Assessment
  - Other
- **2012** Safe, Clean Water Program (Board/Voter approved)

→

FY 2017-2021 CIP
- **8 - Water Resources Stewardship Projects**

Strategic Support

→

Program Plans or Master Plans
- **1990** Facilities Master Plan - Site Analysis Report (Board approved)
- **2005** Needs Assessment and Plan Feasibility Study
- **2012** Campus Master Plan (Board approved)

→

FY 2017-2021 CIP
- **3 - Buildings and Grounds Capital Projects**

Strategic Support

→

Program Plans or Master Plans
- **2001** Information System Master Plan
- **2003** Enterprise-wide Master Communication Plan
- **2012** Information Systems Master Plan

→

FY 2017-2021 CIP
- **5 - Information Technology Capital Projects**

CIP Prioritization and Financial Analyses

FISCAL YEAR 2017-21 CIP SUMMARY

The recommended CIP for FY 2017-21 includes 65 priority projects to implement the goals and objectives of the District's program plans and master plans. These projects are grouped into five types of improvements.

- *Water Supply Capital Improvements*
  30 projects contributing to Ends Policy E-2
- *Flood Protection Capital Improvements*
  19 projects contributing to Ends Policy E-3
- *Water Resources Stewardship Capital Improvements*
  8 projects contributing to Ends Policy E-4
- *Buildings and Grounds Capital Improvements*
  3 projects supporting District efforts to achieve the Ends Policies
- *Information Technology Capital Improvements*
  5 projects supporting District efforts to achieve the Ends Policies

Each of the 65 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for the District are property taxes, a special parcel tax and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. The District continues to receive a small amount of revenue from benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

In November 2012 the voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water). This program replaces the Clean, Safe Creeks Program that would sunset in 2016. Safe, Clean Water has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water program will provide over $750 million of special parcel tax revenue for operations and capital projects.

The District aggressively pursues external funding to supplement its principal revenue when practical. In recent years District projects benefited from $43.4 million in American Recovery and Reinvestment Act (ARRA) funding. A number of District projects are receiving substantial State funding through grants from the Department of Water Resources (DWR) either directly or through local partner agencies. For a complete listing of grants and partnerships see Appendix C.

- $25 million for Lower Silver Creek from DWR
- $8 million for San Francisquito Creek through the Joint Powers Authority
- $30 million Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR
- $2.5 million for Wolfe Road Recycled Water Pipeline from DWR

DISTRICT PRIORITIES	District Funds				
Type of Improvement	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
Water Supply	●			●	
Flood Protection		●		●	
Water Resources Stewardship	●	●		●	
Buildings and Grounds			●		
Information Technology	●				●

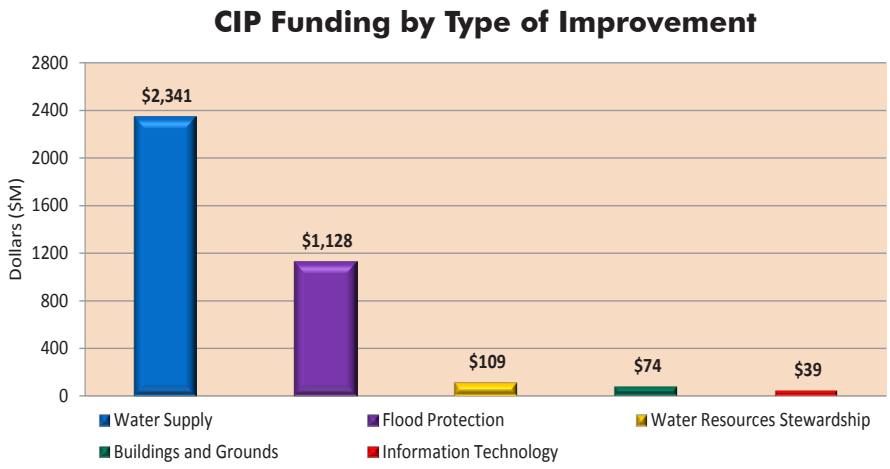
This chart identifies which types of improvement are associated with each of the District's five capital funds.

Overview

The estimated total funding required to implement the 65 projects defined in the CIP is $4.16 billion. The District has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the $4.16 billion total funding, $711 million is expected from the District's various partners, such as the U.S. Army Corps of Engineers (USACE), and $3.450 billion from the District. A list of projects that are funded cooperatively with the District's partners is summarized in Appendix C. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed, or
- Funds that are reimbursed by the partners after the District advances the needed funds.

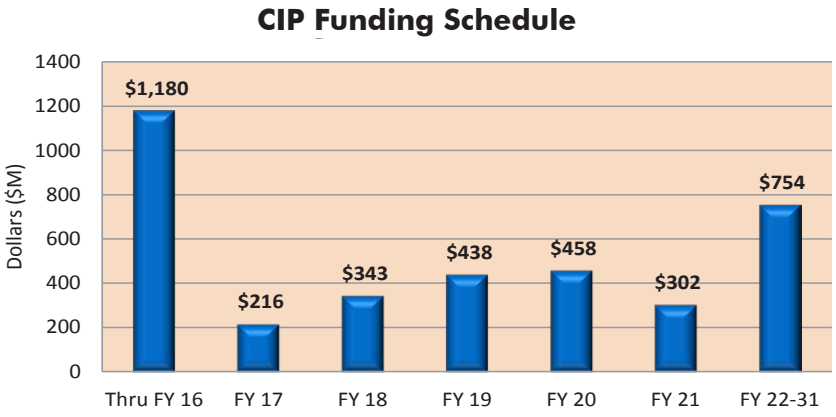
Of the $711 million that is expected from the District's partners, $242 million is advanced by the District and reimbursed later. This $242 million is included in the CIP, and increases the District's total funding requirement from $3.450 billion to $3.692 billion, to ensure that the District has adequate funding to advance the reimbursement.



The chart above shows the distribution by type of improvement, of the $3.692 billion total CIP funding as planned in the FY 2017-21 CIP.

The chart above shows how the $3.692 billion to implement the 65 projects is allocated to each of the five Types of Improvements.

Of the $3.692 billion in total funding for the 65 projects identified in the CIP, the Board has appropriated $1.180 billion in prior years (through June 30, 2016 the end of Fiscal Year 2015-16). This year's CIP process identified additional funding needs of $2.512 billion to complete the projects in the CIP, with $216 million allocated in Fiscal Year 2016-17 and a total of $2.296 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.



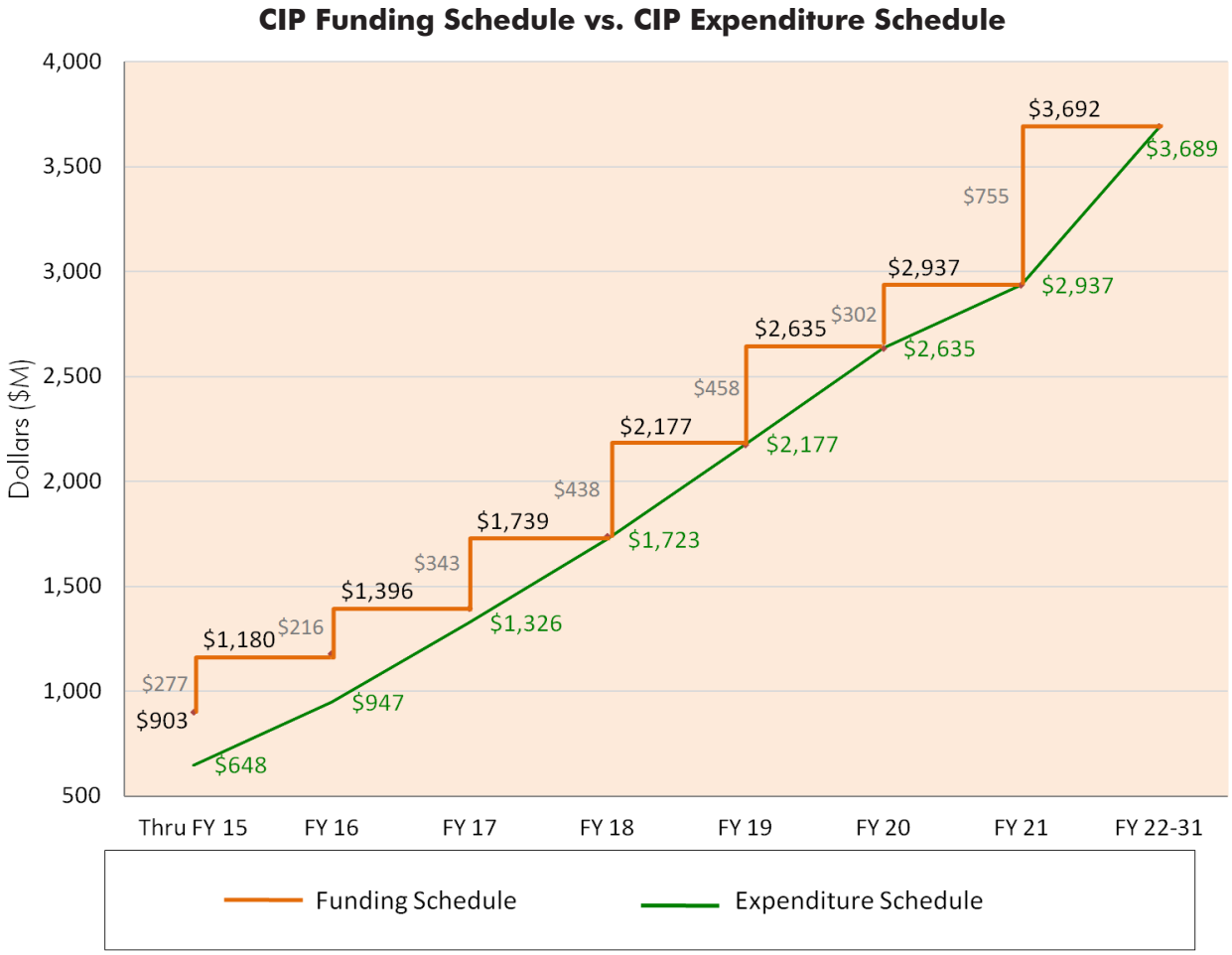
The chart above shows how the $3.692 billion is distributed by fiscal year.

CIP Funding Schedule by Type of Improvement and Funding Sources ($K)

	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	278,011	136,877	27,447	114,041	187,229	345,912	399,647	254,681	594,748	2,311,146
Safe, Clean Water and Natural Flood Protection Fund	630	1,178	-	520	13,488	281	-	-	13,918	30,015
Water Supply Total	278,641	138,055	27,447	114,561	200,717	346,193	399,647	254,681	608,666	2,341,161
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	222,849	44,724	39,878	40,032	29,513	27,227	8,800	11,526	49,400	434,071
Safe, Clean Water and Natural Flood Protection Fund	375,486	75,473	154,497	43,359	89,022	32,891	27,980	25,518	24,653	694,382
Flood Protection Total	598,335	120,197	194,375	83,391	118,535	60,118	36,780	37,044	74,053	1,128,453
WATER RESOURCES STEWARDSHIP										
Water Utility Enterprise Fund	765	-	-	-	2,079	3,652	775	802	7,886	15,959
Watershed Stream Stewardship Fund	14,289	3,075	-	2,225	2,519	2,970	775	802	7,886	34,540
Safe, Clean Water and Natural Flood Protection Fund	2,477	2,991	561	3,729	12,620	18,306	9,510	802	7,886	58,321
Mitigation Total	17,531	6,066	561	5,954	17,218	24,928	11,060	2,405	23,658	108,820
BUILDINGS AND GROUNDS										
General Fund	1,904	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	74,026
Buildings and Grounds Total	1,904	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	74,026
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	473	267	12	180	757	407	166	-	6,738	8,988
General Fund	1,199	-	-	-	-	-	-	-	-	1,199
Information Technology Fund	4,671	1,914	1,983	4,142	1,915	686	880	1,004	13,698	28,910
Information Technology Total	6,343	2,181	1,995	4,322	2,672	1,093	1,046	1,004	20,436	39,097
TOTAL	902,754	276,954	232,912	216,217	342,877	438,349	457,742	302,325	754,339	3,691,557
CUMULATIVE TOTAL	902,754	1,179,708		1,395,925	1,738,802	2,177,151	2,634,893	2,937,218	3,691,557	

FY 2015-16 Funds to be reappropriated

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately $233 million of the already appropriated $1.180 billion is not spent and is reappropriated to Fiscal Year 2016-17 for continued use in those same projects in amounts consistent with the project expenditure schedule for Fiscal Year 2016-17. The following chart explains the relationship between the CIP Funding Schedule and Expenditure Schedule.



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Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

The District manages and operates a complex and integrated water supply infrastructure, including storage, transmission, treatment, and recycled water facilities, to meet the Board's Ends Policy E–2, "There is a reliable, clean water supply for current and future generations."

Storage Facilities

- 10 surface reservoirs
- 393 acres of recharge ponds
- 76 miles of in-stream recharge
- Ground water basins

Transmission Facilities

- 142 miles of pipelines
- 3 pump stations

Treatment Facilities

- 3 treatment plants

Recycled Water Facilities

- Silicon Valley Advanced Water Purification Center
- South County Recycled Water Distribution System

Planning, design and construction of the above facilities took decades of effort. Beginning in the 1930s, reservoirs and recharge ponds were built to halt depletion of the ground water basin and subsidence, followed by pipelines and treatment plants to bring in state and federal water to meet growing water demands in the County.

In the early 1990s, the District embarked on new and challenging capital improvements to upgrade its three drinking water treatment plants in order to meet new Environmental Protection Agency rules for improved water quality required by 1996 amendments to the Safe Drinking Water Act. Fifteen years of effort and capital funding brought the upgrades at Penitencia and Santa Teresa Water Treatment Plants to completion. Delivery of ozonated water produced at these two treatment plants began in 2006.

The Rinconada Water Treatment Plant (RWTP) was built in the late 1960s and is reaching the end of its useful life. Projects to replace and update the treated water valves and residuals management process, and to seismically retrofit the Operations Building are nearing completion. The RWTP Reliability Improvement Project will add raw water ozonation, construct new flocculation and plate settler clarification, and dual media filtration facilities. It will also increase plant capacity from 80 to 100 million gallons per day. Construction of this Project began in the summer 2015 and will continue for approximately 5 years. It will be constructed in a phased approach that will allow the plant to continue operations throughout the construction process.

With a significant portion of the Water Supply infrastructure approaching fifity to sixty years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply Capital Improvement Program in recent years, as shown in the CIP.

The District owns and operates ten dams. While these dams provide water supply, flood management, recreation, and environmental flow benefits, there are consequences and costs for dam ownership. Knowledge of seismic stability design and construction was very rudimentary during the design and construction of District dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability is critical for seismic stability. Several of the District reservoirs have operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how the District's dams would perform under a major seismic event is completed and appropriate corrective actions are implemented.

On November 26, 2010 the Board was informed that Anderson Dam will require a seismic retrofit and the operating restriction was increased to 45 feet below the crest of the dam. Since this briefing, the consultant

has determind that a magnitude 7.2 Maximum Credible Earthquake on nearby Calaveras Fault could cause a deformation (slumping) of the dam crest by 25 feet. The Anderson Dam Seismic Retrofit Project ($200 million) was initiated in January 2011.

The District completed a seismic stability evaluation of Almaden, Calero, and Guadalupe Dams in late 2010. Almaden Dam was found to be seismically stable; however both Calero and Guadalupe Dams will require seismic retrofitting to meet DSOD performance criteria. A project was initiated in fiscal year 2013 to address the Calero and Guadalupe Dams retrofit needs. A separate capital project to address outlet and spillway improvements at Almaden Dam is continuing. Seismic stability evaluations were conducted at Lenihan and Stevens Creek Dams. Both were found to be seismically stable.

Major Capital Improvements Identified in CIP

Storage:

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Calero Dam Seismic Retrofit
- Guadalupe Dam Seismic Retrofit

Transmission:

- 10-Year Pipeline Rehabilitation
- FAHCE Implementation
- Main and Madrone Pipeline Rehabilitation
- Penitencia Delivery Main/Force Main Seismic Retrofit
- Vasona Pumping Plant Upgrades

Treatment:

- IRP2 WTP Operations Buildings Seismic Retrofit
- PWTP Residuals Management
- RWTP Reliability Improvement

Recycled Water:

- South County Recycled Water Pipeline
- PureWater Silicon Valley

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new water supply projects proposed to be added to the Fiscal Year 2017-21 CIP reflect the Board's priorities. The priority criteria used to evaluate these projects is included in Appendix A.

A financial analysis of the Water Utility Enterprise Fund, the funding source for water supply capital improvements, was performed to determine the limitations to funding the projects proposed for the Fiscal Year 2017-21 capital program. Results of this year's prioritization process and financial analysis are summarized in Appendix B.

Based on the feedback from the FY 2006-07 CIP and Board direction, a concerted effort was made to develop a multi-year water charge structure that would support the priority work of the water utility business. Staff analyzed both immediate requirements and anticipated future needs to support operations and the continued appropriations for capital investment needed to maintain infrastructure and comply with water quality regulations. Each year staff reviews Board priorities, the financial needs of the water utility enterprise fund, current political and economic factors and updates the multi-year structure. The rate structure for the first year is recommended to the Board for adoption during the annual rate setting process.

While the District has one Water Utility fund, the District has two zones of benefit for the purposes of setting groundwater production charges. The North County Zone is very different from the South County Zone in that the water infrastructure is substantially separate and distinct with an entirely different cost of providing service. For example the north zone overlays the Santa Clara groundwater subbasin and is much more densely populated requiring a large amount of imported water from outside the county to provide a reliable water supply. To receive, filter and distribute

the imported water, the District chose to build 3 water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. The south zone on the other hand overlays the Coyote and Llagas groundwater subbasins and is more sparsely populated. South County relies primarily on groundwater to serve roughly 50% agricultural and 50% non-agricultural water needs. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County. A small amount of imported water is used to recharge the groundwater subbasins in the South County. The groundwater subbasins have the ability to absorb the recharge and remain healthy under normal water usage levels unlike the North County where several sections of the groundwater basin are very sensitive, which is the main reason for building the treatment plant system long ago.

To fully fund the Water Supply projects in the FY 2017-21 CIP an increase in the groundwater production charges of 19.9% in Zone W-2 (North County) and 10.4% in Zone W-5 (South County) will be required in FY 2016-17. Preliminary projections indicate the need for annual rate increases in subsequent years ranging from 11% to 17% for North County and 5% to 6% for South County.

The majority of capital projects included in the 5-Year CIP are related to asset management which replaces aging equipment and facilities, infrastructure reliability, which protects the county's baseline water supply or Advanced Purified Water which produces a drought proof source of water.

The District is currently engaged in several critical studies related to understanding the conditions of various existing water supply facilities and meeting future water supply needs of the county including South Bay Water Recycling Strategic Master Plan, which will be presented to the Board in the summer of 2016, and collaborating with the City of Sunnyvale on their Recycled Water Master Plan. These studies will likely identify a number of new capital projects with significant capital investments.

Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2015-16.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
	STORAGE FACILITY										
91854001	Almaden Dam Improvements	7,360	2,712	-	2,482	17,716	10,917	9,799	5,532	-	56,518
91864005	Anderson Dam Seismic Retrofit (C1)	30,230	1,006	1,804	-	54,430	66,699	48,593	-	-	200,958
91084020s	Calero and Guadalupe Dams Seismic Retrofits	9,567	7,966	2,182	9,267	15,889	57,150	27,036	22,818	6,040	155,733
91C40377	Coyote Pumping Plant ASD Replacement	-	-	-	-	-	562	1,954	9,586	5,029	17,131
91234011	Coyote Pumping Plant Warehouse	416	2,597	2,106	121	-	-	-	-	-	3,134
91084019	Dam Seismic Stability Evaluation	18,812	-	1,821	-	-	-	485	487	-	19,784
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	1,628	-	3,608	706	1,226	-	756	25,998	33,922
	TRANSMISSION FACILITY										
95084001s	5-Year Pipeline Rehabilitation	14,362	9,481	885	9,208	-	-	-	-	-	33,051
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	-	16,444	20,762	11,818	4,637	46,483	100,144
92C40357	FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
26C40349	IRP2 Additional Line Valves (A3)	-	-	-	-	-	-	-	-	13,918	13,918
26564001	Main & Madrone Pipelines Restoration (A1)	630	1,178	-	520	13,488	281	-	-	-	16,097
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	8	-	1,470	328	106	-	-	-	3,054
94384002s	Penitencia Delivery Main/Force Main Seismic Retrofit	4,067	17,773	3,439	9,172	103	-	-	-	-	31,115
92374005	SCADA Remote Architecture & Communications Upgrade	370	32	-	374	389	619	819	852	3,477	6,932
92764009	Small Capital Improvements, Raw Water Transmission	n/a	38	-	-	115	-	53	-	3,438	3,644
94764006	Small Capital Improvements, Treated Water Transmission	n/a	-	-	-	61	84	-	-	-	145
92264001	Vasona Pumping Plant Upgrade	-	-	-	119	1,321	1,789	17,673	85	-	20,987
	TREATMENT FACILITY										
93084011	Fluoridation at WTPs	1,148	5,338	3	3,009	-	-	-	-	-	9,495
93764003	IRP2 WTP Ops Bldgs Seismic Retrofit	19,686	1,306	684	798	76	-	-	-	-	21,866
93234043	PWTP Clearwell Recoating & Repair	4,516	1,403	2,593	550	119	-	-	-	-	6,588
93C40390	PWTP Residuals Management	-	-	-	-	703	1,462	7,835	-	-	10,000
93294051	RWTP FRP Residuals Management Modifications	26,022	286	-	118	-	-	-	-	-	26,426
93294057	RWTP Reliability Improvement	26,507	45,009	-	44,712	44,496	44,811	46,345	146	-	252,026
93294056	RWTP Treated Water Valves Upgrade	8,075	296	18	55	-	-	-	-	-	8,426
93764004	Small Capital Improvements, Water Treatment	n/a	3,509	-	2,831	782	5,465	3,562	3,492	41,770	61,411
	RECYCLED WATER FACILITY										
91304001s	PureWater Silicon Valley (PWSV)	2,000	18,499	1,030	9,669	28,629	129,802	208,623	191,600	355,904	944,726
91184008	Silicon Valley Advanced Water Purification Center	75,928	838	86	49	-	-	-	-	-	76,815
91094007s	South County Recycled Water Pipeline	17,195	10,589	10,326	15,772	183	79	361	-	-	44,179
91244001	Wolfe Road Recycled Water Pipeline	10,608	6,563	470	657	-	-	-	-	-	17,828
	TOTAL	278,641	138,055	27,447	114,561	200,717	346,193	399,647	254,681	608,666	2,341,161

FY 2015-16 Funds to be reappropriated

Water Supply Capital Improvements

The following table shows funding requirements from each funding source for water supply capital.

Water Supply - Funding Source ($K)

Fund Number	FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
61	Water Utility Enterprise Fund	278,011	136,877	27,447	114,041	187,229	345,912	399,647	254,681	594,748	2,311,146
26	Safe, Clean Water and Natural Flood Protection Fund	630	1,178	-	520	13,488	281	-	-	13,918	30,015
	TOTAL	278,641	138,055	27,447	114,561	200,717	346,193	399,647	254,681	608,666	2,341,161

FY 2015-16 Funds to be reappropriated

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Project	**Almaden Dam Improvements**
Program	Water Supply – Storage
Priority No.	51
Project No.	91854001
District Contact	Katherine Oven koven@valleywater.org

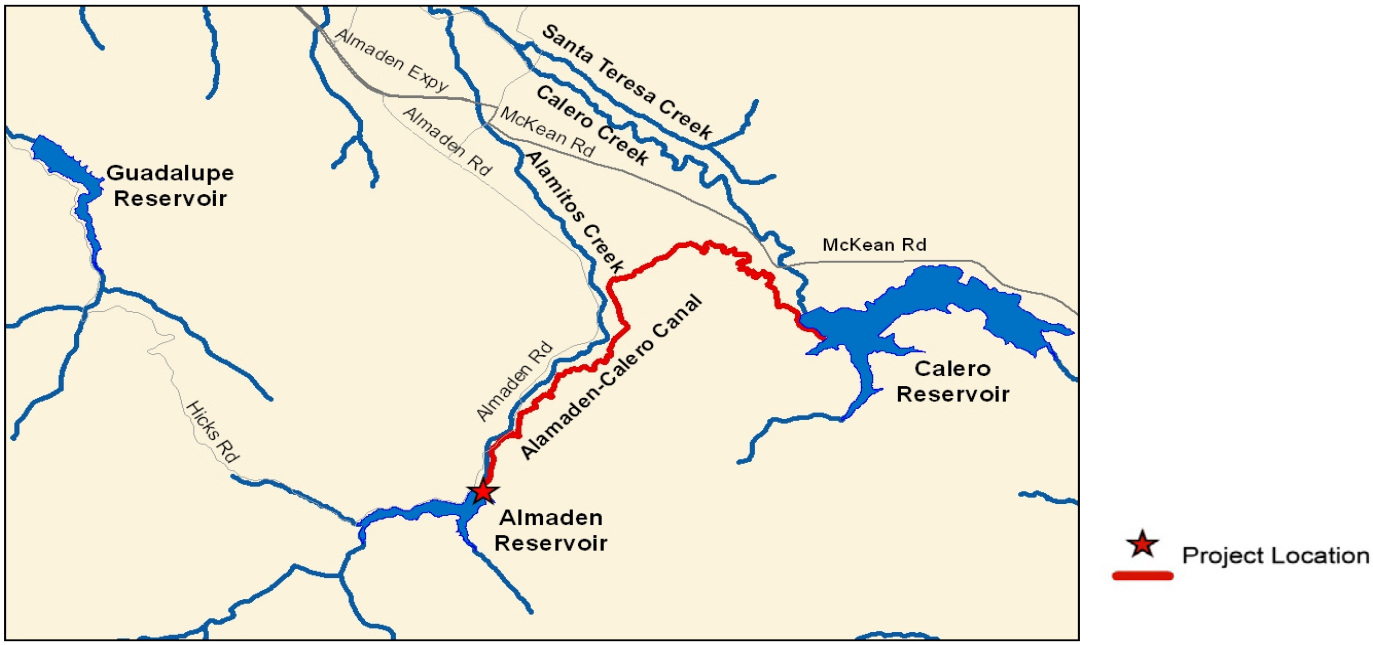
Aerial view of Almaden Dam and spillway, with a portion of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Almaden Dam Outlet Works to accomplish the following objectives:

- Modify or construct a new intake structure, capable of releasing 246 cubic feet-per-second (cfs) of water without flushing of sediments through the outlet works.
- Correct existing problems with the outlet energy dissipation structure, piping and valves.
- Restore operational capacity to the Almaden-Calero Canal and stabilize and improve maintenance access.

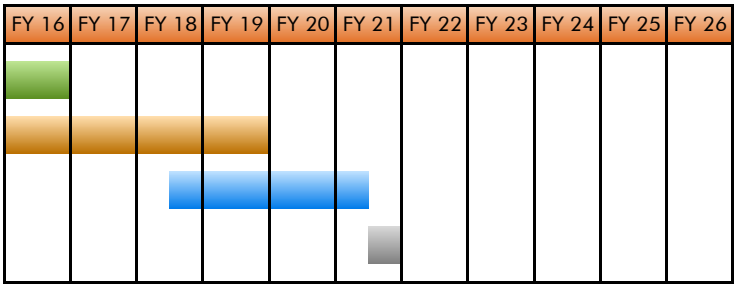
PROJECT LOCATION



SCHEDULE & STATUS

July 1995 to June 2021

Phase	Cost
Plan	6,974
Design	3,528
Construct	39,686
Closeout	302
	50,490



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91854001-Almaden Dam Improvements	7,386	2,686	2,482	16,095	10,815	8,135	5,402	0	53,001
with inflation	7,386	2,686	2,482	17,716	10,917	9,799	5,532	0	56,518

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91854001-Almaden Dam Improvements	7,360	2,712	0	2,482	17,716	10,917	9,799	5,532	0	56,518

Adjusted Budget includes adopted budget plus a planned budget adjustment of $34,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	56,518
Other Funding Source	0
Total	56,518

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $2,000 per year, beginning in FY 2022. Manually flushing the control valves during the winter months to remove silt will no longer be required.

USEFUL LIFE: 50+ Years

Project	**Anderson Dam Seismic Retrofit**
Program	Water Supply – Storage
Priority No.	100
Project No.	91864005
District Contact	Katherine Oven koven@valleywater.org

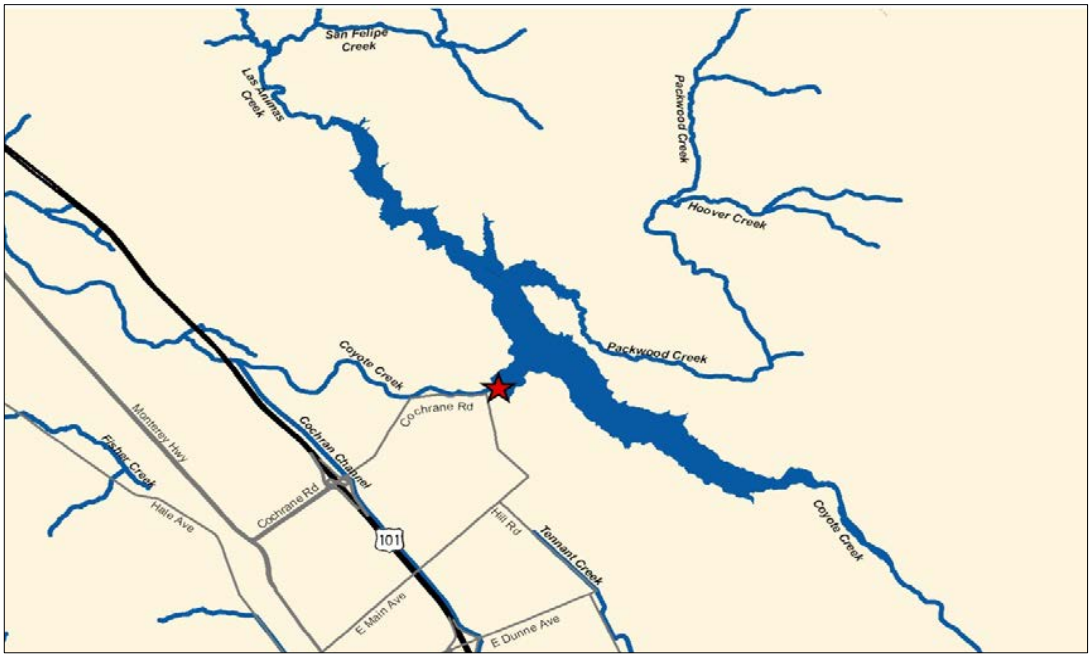
Aerial view of Anderson Dam and spillway, with a portion of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic retrofit or replacement of outlet works at Anderson Dam, pending completion of a field investigation that will determine whether the Coyote Fault is determined to be "active". Seismic stability improvements will accomplish the following objectives:

- Resolve seismic stability deficiencies to ensure public safety.
- Restore lost reservoir storage capacity resulting from the operational restriction issued by Division of Safety of Dams (DSOD).
- Resolve the DSOD/FERC (Federal Energy Regulatory Commission) requirements in a timely manner.

PROJECT LOCATION

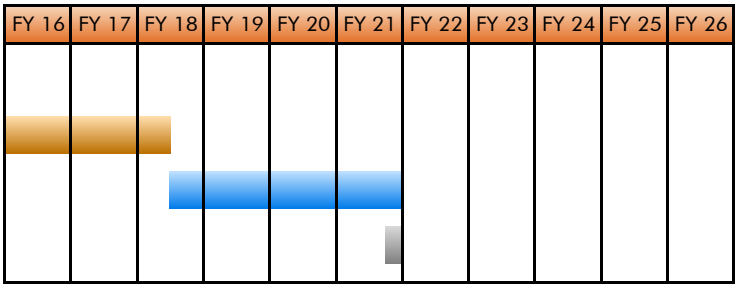


★ Project Location

SCHEDULE & STATUS

January 2011 to June 2021

Phase	Cost
Plan	11,522
Design	8,046
Construct	157,400
Closeout	200
	177,168



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91864005-Anderson Dam Seismic Retrofit	28,014	1,418	940	46,500	65,400	47,200	0	0	189,472
with inflation	28,014	1,418	940	55,294	66,699	48,593	0	0	200,957

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91864005-Anderson Dam Seismic Retrofit	30,230	1,006	1,804	0	54,430	66,699	48,593	0	0	200,957

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	130,814
SCVWD Safe Clean Water Fund	66,053
Department of Water Resources (Prop 84)	4,090
Total	**200,957**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project Calero and Guadalupe Dams Seismic Retrofits
Program Water Supply - Storage **Priority No.** 94
District Contact Katherine Oven koven@valleywater.org **Project No.** 91084020s

Aerial view of the Calero Dam and reservoir

Areial view of the Guadalupe Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Calero and Guadalupe Dams to accomplish the following objectives:

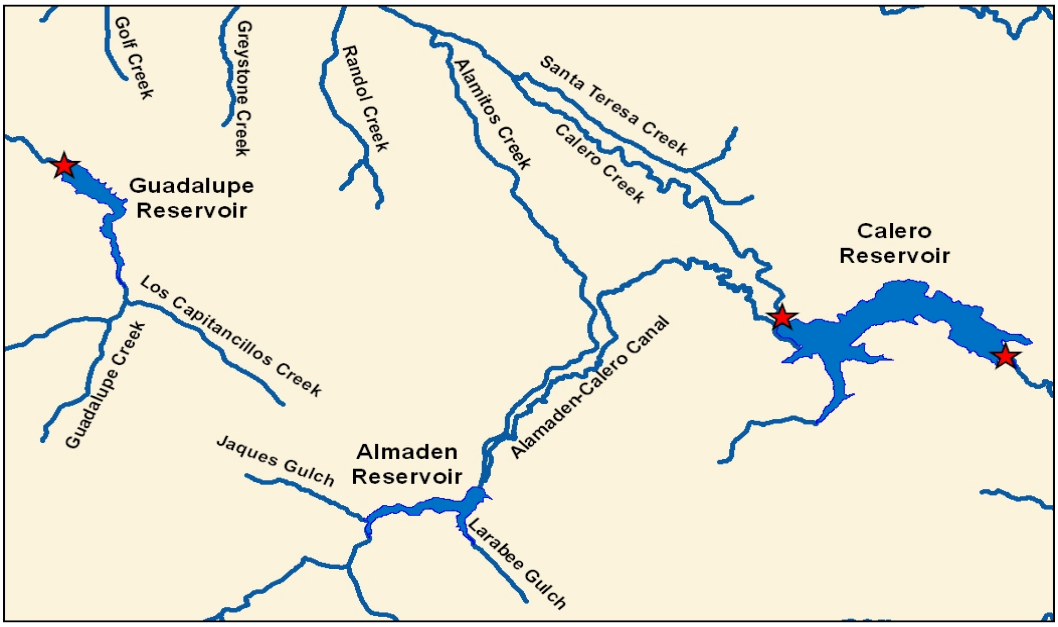
Calero Dam

- Stabilize the embankment to withstand a Maximum Credible Earthquake (MCE).
- Modify or replace the outlet works if determined to be inadequate.
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood (PMF).
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage.
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike.

Guadalupe Dam

- Stabilize the embankment to withstand a MCE.
- Implement improvements as necessary for the Dam system to safely pass the PMF.
- Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams (DSOD) requirements.
- Relocate the intake structure out of the upstream berm in a timely manner
- Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process.

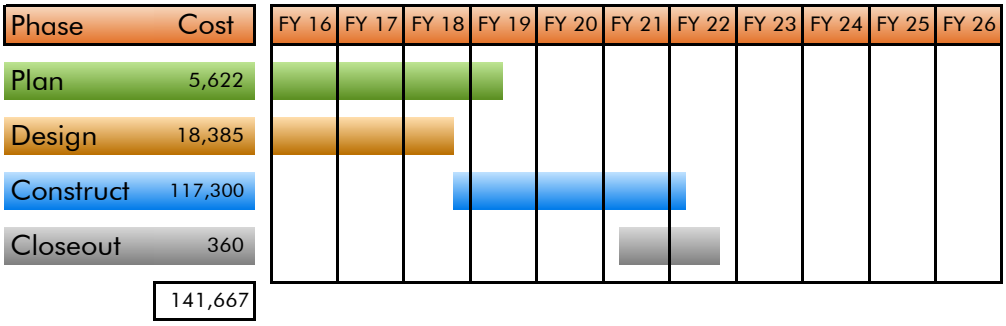
PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2012 to March 2022



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	6,882	437	201	150	150	0	0	0	7,820
with inflation	6,882	437	201	162	169	0	0	0	7,851
91874004 - Calero Dam Seismic Retrofit-Design & Construct	64	4,555	4,604	11,930	46,000	5,750	1,438	0	74,341
with inflation	64	4,555	4,604	15,497	46,749	5,877	1,533	0	78,880
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	2	3,411	4,696	362	6,010	20,700	20,700	5,822	61,703
with inflation	2	3,411	4,696	392	10,401	21,159	21,285	6,040	67,385
TOTAL	**6,948**	**8,403**	**9,501**	**12,442**	**52,160**	**26,450**	**22,138**	**5,822**	**143,864**
with inflation	**6,948**	**8,403**	**9,501**	**16,051**	**57,319**	**27,036**	**22,818**	**6,040**	**154,116**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY15**	**FY16**		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	13,967	-4,499	2,149	0	0	0	0	0	0	9,468
91874004 - Calero Dam Seismic Retrofit-Design & Construct	75	4,555	11	4,593	15,497	46,749	5,877	1,533	0	78,880
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	24	3,411	22	4,674	392	10,401	21,159	21,285	6,040	67,385
TOTAL	**14,066**	**3,467**	**2,182**	**9,267**	**15,889**	**57,150**	**27,036**	**22,818**	**6,040**	**155,733**

Adjusted Budget includes adopted budget plus approved budget adjustments. Total allocated funding exceeds current planned expenditures by approximately $1,617,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	155,733
Other Funding Source	0
Total	**155,733**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Pumping Plant ASD Replacement**
Program	Water Supply – Storage
Priority No.	71
Project No.	91C40377
District Contact	Katherine Oven koven@valleywater.org

ASD Motors at the Coyote Pumping Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Coyote Pumping Plant Adjustable Spped Drives (ASD) to accomplish the following objectives:

- Replace existing outdated and unsupported ASDs with the latest technology.
- Modify/convert existing six wound rotor motors to be compatible with new stator fed ASD.
- Upgrade the HVAC system to support the additional cooling requirements.
- Modify/upgrade Supervisory Control and Data Acquisition (SCADA) control and instrumentation systems, and control strategy to support the new ASDs.
- Replace two main medium voltage circuit breaker and one medium voltage tie circuit breaker (switch) which are at the end of service life.
- Replace motor control equipment line-up (MCE) with new switchgears.
- Installation of a pump motor vibration and a power monitoring systems and motor control center.

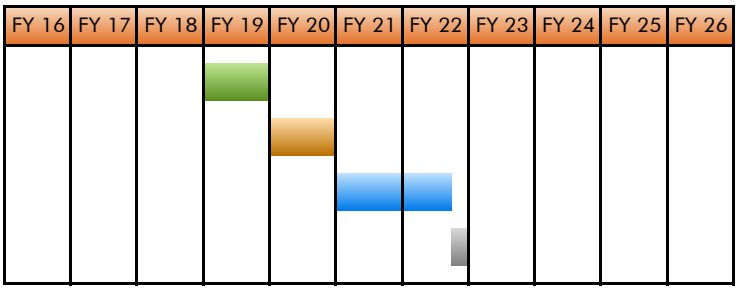
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2018 to June 2022

Phase	Cost
Plan	520
Design	1,650
Construct	12,285
Closeout	65
	14,520



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91C40377-Coyote Pumping Plant ASD Replacement	0	0	0	0	500	1,670	8,190	4,160	14,520
with inflation	0	0	0	0	562	1,954	9,586	5,029	17,131

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91C40377-Coyote Pumping Plant ASD Replacement	0	0	0	0	0	562	1,954	9,586	5,029	17,131

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	17,131
Other Funding Sources	0
Total	17,131

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $60,000 per year beginning in FY 2023.

USEFUL LIFE: Not Avaliable

Project	**Coyote Pumping Plant Warehouse**
Program	Water Supply - Storage
Priority No.	50
Project No.	91234011
District Contact	Katherine Oven koven@valleywater.org

Existing storage containers being used to secure equipment and spare parts

PROJECT DESCRIPTION

This project plans, designs, and constructs the Coyote Pumping Plant Warehouse to accomplish the following objectives:

- Provide suitable storage space for pipeline spare parts and appurtenances to protect such materials from weather.
- Improve District's staff efficiency and effectiveness in pipeline maintance work.

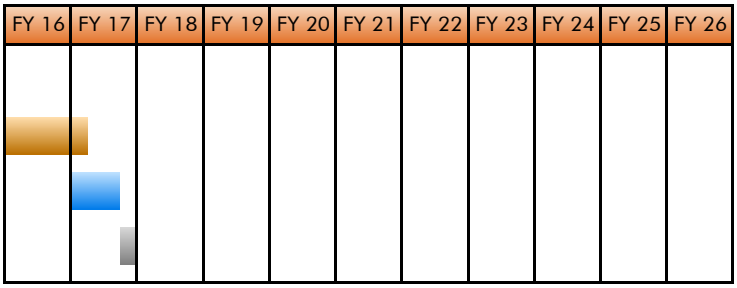
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2014 to June 2017

Phase	Cost
Plan	-
Design	630
Construct	2,076
Closeout	60
	2,766



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91234011-Coyote Pumping Plant Warehouse	368	539	2,227	0	0	0	0	0	3,134
with inflation	368	539	2,227	0	0	0	0	0	3,134

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91234011-Coyote Pumping Plant Warehouse	416	2,597	2,106	121	0	0	0	0	0	3,134

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	3,134
Other Funding Sources	0
Total	**3,134**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined upon completion of the design phase.

USEFUL LIFE: 50 years

Project	**Dam Seismic Stability Evaluations**
Program	Water Supply – Storage
Priority No.	100
Project No.	91084019
District Contact	Hemang Desai hdesai@valleywater.org

Field exploration for seismic stability evaluations

PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for 9 dams (shown on the map) to accomplish the following objectives:

- Address seismic stability issues.
- Provide for public safety.
- Ensure operational availability of reservoirs.
- Address protection of the assets.

Site specific planning, design, and construction of dam seismic stability improvements will be funded separately. This project funds preliminary planning (seismic stability evaluation, to determine the need for seismic stability improvements) for eight dams. The seismic stability evaluation for Anderson Dam was completed in a separate project. The seismic analysis for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams has been completed. The analysis for Coyote, Chesbro and Uvas is continuing through 2020.

PROJECT LOCATION

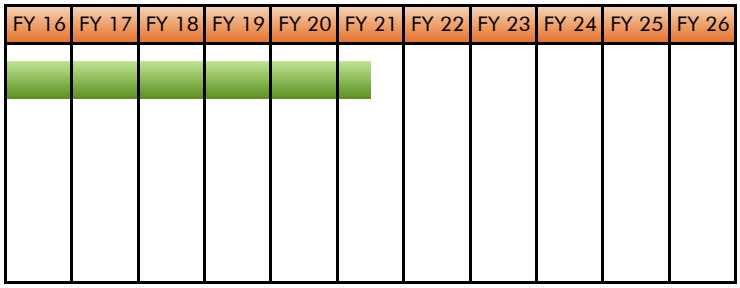
★ Project Location

SCHEDULE & STATUS

August 2009 to December 2020

(Planning Phase Only)
Dam Safety Evaluation Report will take 5 years to complete, starting in 2015

Phase	Cost
Plan	12,026
Design	-
Construct	-
Closeout	-
	12,026



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91084019-Dam Seismic Stability Evaluations	16,159	832	676	500	500	450	400	0	19,517
with inflation	16,159	832	676	541	562	526	487	0	19,783

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91084019-Dam Seismic Stability Evaluations	18,812	0	1,821	0	0	0	485	487	0	19,783

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	19,783
Other Funding Source	0
Total	19,783

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Small Capital Improvements, San Felipe**
Program	Water Supply – Storage
Priority No.	78
Project No.	91214010s
District Contact	Angela Cheung acheung@valleywater.org

Suction wear ring bacterial corrosion of Impeller. Similar rehabilitation projects will be done in this project.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project implements a systematic approach to equipment replacement and renewal at facilities contained within San Felipe Division by designing and constructing improvements identified through the District's 10-year asset management program. Infrastructure within this project includes tunnels, large diameter pipelines and valve structures, pumps and associated equipment, as well as a large above ground storage tank. The Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors, partner cities, and other agencies. Planned projects for FY 2017 include:

- 91214010–Reach 1: Replace Pacheco Pumping Plant Fire Pump
- 91224010–Reach 2: Fix Calaveras Fault Inlet/Outlet road access; Fix Santa Clara Tunnel leakage, grouting and lining ; Cathodic protection for 2 rectifiers and Anodes Well.
- 91234010–Reach 3: Cathodic protection for 2 rectifiers and Anodes Well; Replace Coyote pump discharge valve operator, flowmeter, HVOS air compressor, and isolation vavle control valve operator.

All three projects have positive NPV saving at feasibility study phase subject to design phase validation.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	24,453

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,412	1,497	563	780	0	0	5,277	9,529
with inflation	n/a	1,412	1,497	609	877	0	0	8,048	12,443
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	180	1,145	46	0	0	0	0	1,371
with inflation	n/a	180	1,145	50	0	0	0	0	1,375
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	35	966	43	310	0	621	11,578	13,553
with inflation	n/a	35	966	47	349	0	756	17,951	20,103
TOTAL	**0**	**1,627**	**3,608**	**652**	**1,090**	**0**	**621**	**16,855**	**24,453**
with inflation	**0**	**1,627**	**3,608**	**705**	**1,226**	**0**	**756**	**25,999**	**33,921**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY15**	**FY16**		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	1,413	0	1,497	609	877	0	0	8,048	12,444
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	180	0	1,145	50	0	0	0	0	1,375
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	35	0	966	47	349	0	756	17,951	20,103
TOTAL	**0**	**1,628**	**0**	**3,608**	**705**	**1,226**	**0**	**756**	**25,999**	**33,922**

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	30,941
San Benito County Water District	2,981
Total	**33,922**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**5-Year Pipeline Rehabilitation**
Program	Water Supply – Transmission
Priority No.	56
Project No.	95084001s
District Contact	Jim Crowley jcrowley@valleywater.org

A typical line valve assembly to be rehabilitated

PROJECT DESCRIPTION

This project plans, designs, and constructs major repairs and improvements to the District's pipelines and tunnels to accomplish the following objectives:

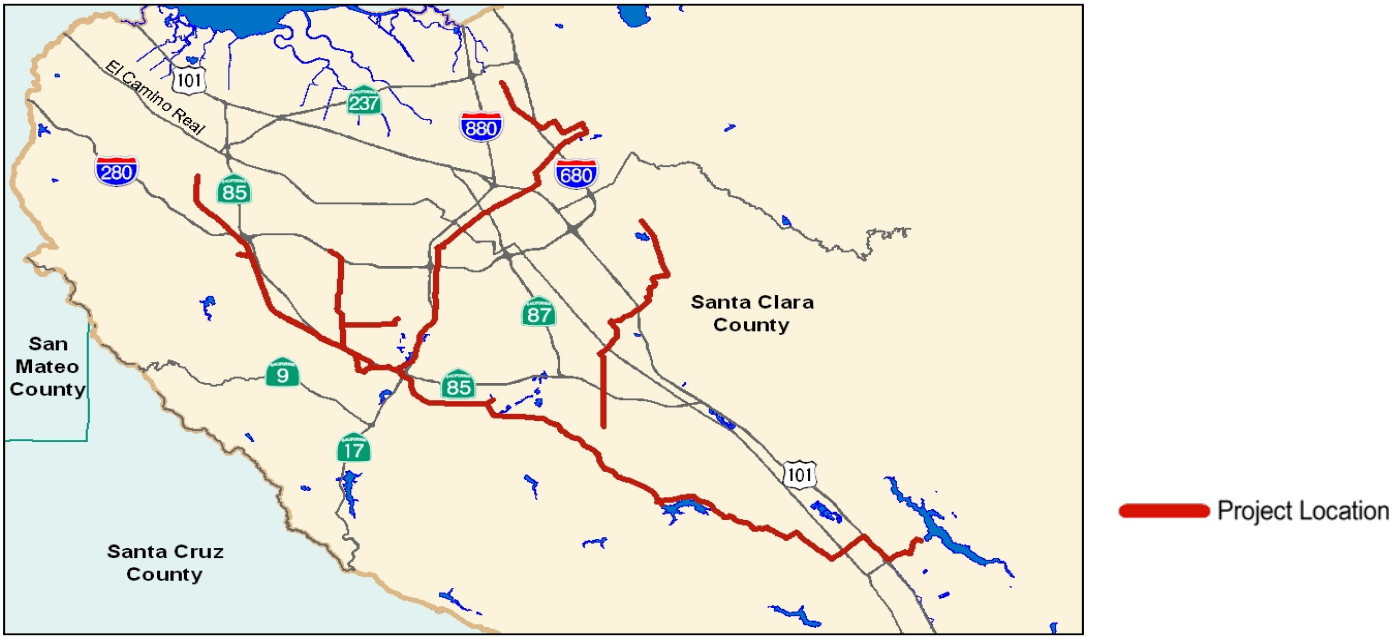
- Perform internal inspections, maintenance, and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as approprate.
- Upgrade pipeline air valve venting in accordance with CA Department of Public Health (CDPH) guidelines.
- Modify failure prone pipeline appurtenance connections.

This project funds inspection and rehabilitation work along the pipeline and tunnel as identified below:

- 2017: West Pipeline Inspection and Rehabilitation Project

The project also funds the development of the Pipeline Maintenance Program document for Fiscal Years 2018 to 2027 and CEQA/NEPA documenation and permit acquisitions.

PROJECT LOCATION



SCHEDULE & STATUS

July 2012 to June 2017

Phase	Cost
Plan	1,656
Design	4,448
Construct	26,234
Closeout	87
	32,425

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
95084001-5-year Pipeline Rehabilitation	12,612	8,868	4,637	0	0	0	0	0	26,117
with inflation	12,612	8,868	4,637	0	0	0	0	0	26,117
91214001-Pacheco Conduit Inspection and Rehabilitation	0	1,478	5,434	0	0	0	0	0	6,912
with inflation	0	1,478	5,434	0	0	0	0	0	6,912
TOTAL	**12,612**	**10,346**	**10,071**	**0**	**0**	**0**	**0**	**0**	**33,029**
with inflation	**12,612**	**10,346**	**10,071**	**0**	**0**	**0**	**0**	**0**	**33,029**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
95084001-5-year Pipeline Rehabilitation	14,362	7,981	863	3,774	0	0	0	0	0	26,117
91214001-Pacheco Conduit Inspection and Rehabilitation	0	1,500	22	5,434	0	0	0	0	0	6,934
TOTAL	**14,362**	**9,481**	**885**	**9,208**	**0**	**0**	**0**	**0**	**0**	**33,051**

Adjusted Budget includes adopted budget plus approved budget adjustments. Total funding allocation exceeds total project cost by approximately $22,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	33,051
San Benito County Water District	1,520
Total	**34,571**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**10-Year Pipeline Inspection & Rehabilitation**
Program	Water Supply – Transmission
Priority No.	79
Project No.	95084002
District Contact	Jim Crowley jcrowley@valleywater.org

A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

This project involves the inspection, planning, design, and renewal of the District's pipelines and tunnels to accomplish the following objectives:

- Perform dewatering and internal inspections of District's pipelines and tunnels.
- Renew distressed pipe sections as required. Renewal encompasses the actions of repair, rehabilitation, and replacement.
- Perform maintenance and repair activities as required.
- Replace old valves, flow meters, pipeline appurtenance assemblies, and piping as appropriate.
- Modify failure prone pipeline appurtenance connections.

This project funds inspection and renewal work along the various pipelines and tunnels as identified below:

- 2018: Cross Valley Pipeline, Calero Pipeline, Central Pipeline
- 2019: Almaden Valley Pipeline, Santa Teresa Force Main, Rinconada Force Main, Santa Clara Conduit (SC Tunnel to SV1), West Pipeline (RWTP to Cox LV)
- 2020: Parallel East Pipeline, West Pipeline, Santa Clara Distributary, Santa Clara Conduit, Anderson Force Main
- 2021: Almaden Valley Pipeline, Santa Teresa Force Main, Rinconada Force Main, Santa Clara Conduit, West Pipeline (Cox LV to Grainger)
- 2022: Pacheco Conduit, Pacheco Tunnel Reach 2, Santa Clara Tunnel, Penitencia Force Main, Penitencia Delivery Main, South Bay Aqueduct Retrofit Inspection

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	-
Design	-
Construct	85,300
Closeout	-
	85,300

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	0	15,500	19,000	10,500	4,000	36,300	85,300
with inflation	0	0	0	16,444	20,762	11,818	4,637	46,484	100,145

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
95084002-10-Year Pipeline Inspection & Rehabilitation	0	0	0	0	16,444	20,762	11,818	4,637	46,484	100,145

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	100,145
Other Funding Sources	0
Total	100,145

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project	**FAHCE Implementation**
Program	Water Supply - Transmission
Priority No.	73
Project No.	92C40357
District Contact	Katherine Oven koven@valleywater.org

Fish habitats such as this will be developed for Habitat Conservation. Actual locations will differ.

PROJECT DESCRIPTION

This project funds habitat conservation projects to be implemented as part of the Three Creeks Habitat Conservation Plan (TC HCP). The Three Creeks HCP grew out of the 1996 Water Rights Complaint and subsequent Fish and Aquatic Habitat Conservation Effort (FAHCE). The capital project components of the conservation measures are likely to include projects such as: upgrades for operational adaptibility and flexibility; instream channel enhancements; new fish screens, and instream barrier removals. When implemented, the TC HCP currently under development will contain conservation measures designed to:

- Meet instream flows to support fish spawning, rearing and migration.
- Provide fish passages to accommodate annual migration.
- Improve instream habitat for steelhead.

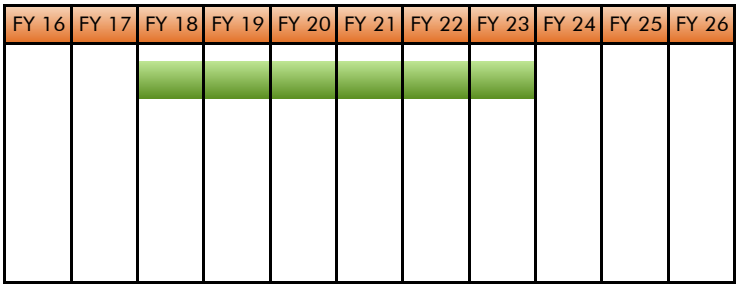
PROJECT LOCATION

Project sites will be located at reservoirs and streams within the Three Creeks Project Area, in the Guadalupe, Coyote and Stevens Creek Watersheds. Project site locations are yet to be determined and no map is provided.

SCHEDULE & STATUS

July 2017 to June 2023

Phase	Cost
Plan	145,108
Design	-
Construct	-
Closeout	-
	145,108



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
92C40357-FAHCE Implementation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108
with inflation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
92C40357-FAHCE Implementation	0	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	145,108
Other Funding Source	0
Total	145,108

OPERATING COST IMPACTS

Operating cost impacts will vary, depending on the requirements for maintenance of each site. Once the sites have been identified, operating costs will be determined based on the existing conditions and maintenance identified for each site.

USEFUL LIFE: Not Available

Project	**IRP2 Additional Line Valves**
Program	Water Supply – Transmission
Priority No.	63
Project No.	26C40349
District Contact	Katherine Oven koven@valleywater.org

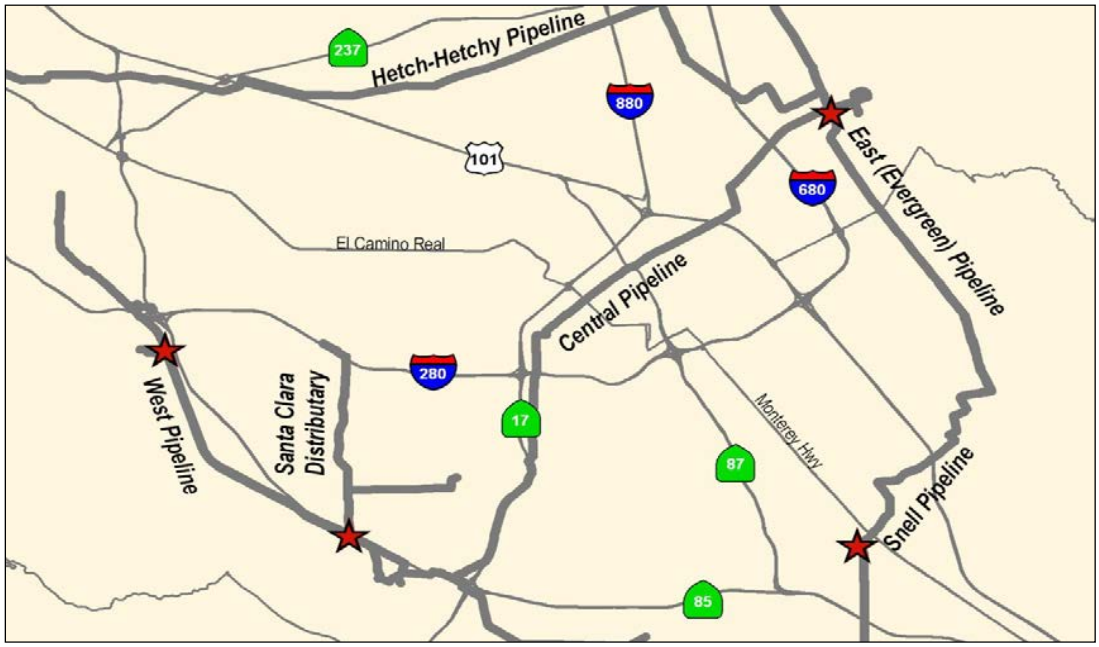
New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

PROJECT DESCRIPTION

This project plans, designs, and constructs four additional line valves in the treated water distribution system, as defined in the Water Infrastructure Reliability Plan, Phase 2 (IRP2). The new line valves will be at various locations along the East, West, and Snell pipeline to accomplish the following objectives:

- Allow the district to isolate sections of the treated water pipeline to prevent water from bleeding out damaged sections following a major seismic event.
- Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

PROJECT LOCATION

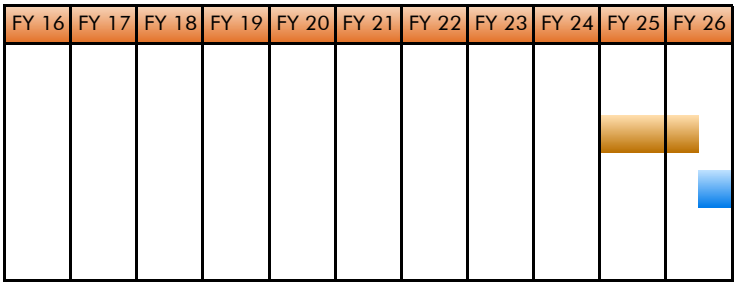


★ Project Location

SCHEDULE & STATUS

July 2024 to June 2027

Phase	Cost
Plan	894
Design	1,080
Construct	7,655
Closeout	146
	9,774



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26C40349-IRP2 Additional Line Valves	0	0	0	0	0	0	0	9,774	9,774
with inflation	0	0	0	0	0	0	0	13,918	13,918

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26C40349-IRP2 Additional Line Valves	0	0	0	0	0	0	0	0	13,918	13,918

FUNDING SOURCES

(in thousands $)

SCVWD Safe Clean Water Fund	13,918
Other Funding Source	0
Total	**13,918**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not signifiantly alter the existing facilities or modes of operation.

USEFUL LIFE: 35 Years

Project Main & Madrone Pipelines Restoration
Program Water Supply - Transmission
District Contact Katherine Oven koven@valleywater.org
Priority No. 70
Project No. 26564001s

Main Avenue Ponds facing North

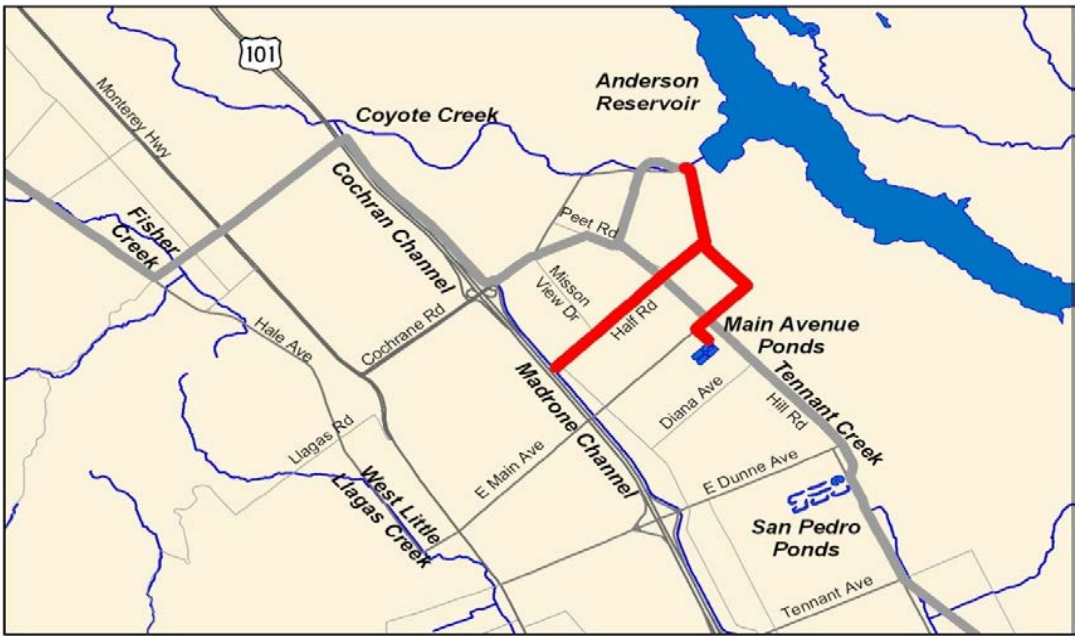
Madrone Pipeline Outlet into Madrone Channel looking North along Northbound Interstate 101

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on the full length of the Madrone Pipeline and rehabilitates the Main Avenue Pipeline to accomplish the following objectives:

- Provide the means to utilize another reliable water source, (e.g. Anderson Reservoir) to supply water to the Main Avenue Ponds and the Madrone Channel.
- Allow for greater flows to the Main Avenue Ponds and the Madrone Channel.
- Maximize imported water flows to the treatment plants.

PROJECT LOCATION

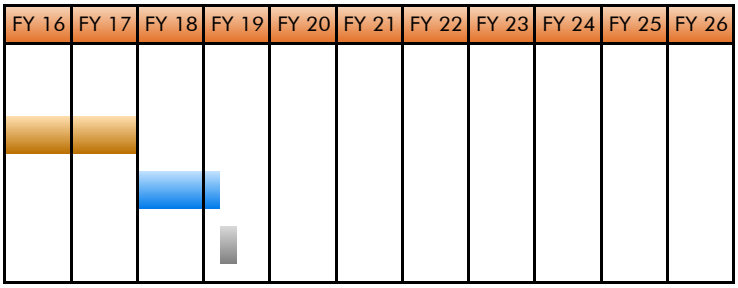


Project Location

SCHEDULE & STATUS

July 2014 to December 2018

Phase	Cost
Plan	361
Design	1,949
Construct	20,210
Closeout	90
	22,610



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26564001-Main & Madrone Pipelines Restoration	260	1,548	520	12,700	250	0	0	0	15,278
with inflation	260	1,548	520	13,488	281	0	0	0	16,097

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26564001-Main & Madrone Pipelines Restoration	630	1,178	0	520	13,488	281	0	0	0	16,097

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	8,300
SCVWD Water Utility Enterprise Fund	7,797
Total	16,097

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as it does not significantly alter the facility or modes of operation.

USEFUL LIFE: 40 Years

Project	**Pacheco/Santa Clara Conduit Right of Way Acquisition**
Program	Water Supply – Transmission
Priority No.	77
Project No.	92144001
District Contact	Katherine Oven koven@valleywater.org

Access to much of the San Felipe Division pipelines must currently be made through private property, due to a lack of easements, such as Bloomfield access at Vault 21-23.

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements related to the acquisition of right-of-way along the South County Pipeline to accomplish the following objectives:

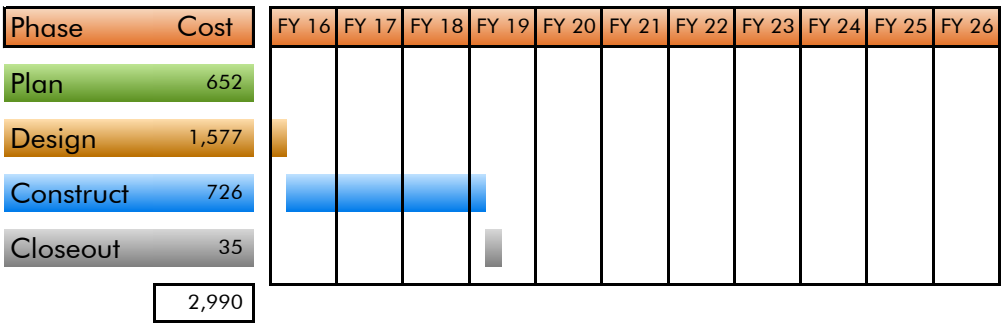
- Provide unlimited access to District owned pipeline.
- Reduce conflicts with local land owners and improve response time for emergency repairs or operations.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2009 to December 2018



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,018	132	1,470	304	95	0	0	0	3,019
with inflation	1,018	132	1,470	328	106	0	0	0	3,054

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	8	0	1,470	328	106	0	0	0	3,054

Adjusted Budget includes adopted budget plus a planned budget adjustment of $8,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	3,035
San Benito County Water District	19
Total	3,054

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $8,000 per year, beginning in FY 2020, for vegetation control and/or maintenance of fences, gates and locks for the access roads.

USEFUL LIFE: 15-20 Years

Project	**Penitencia Delivery Main/Force Main Seismic Retrofit**
Program	Water Supply – Transmission
Priority No.	84
Project No.	94384002s
District Contact	Katherine Oven koven@valleywater.org

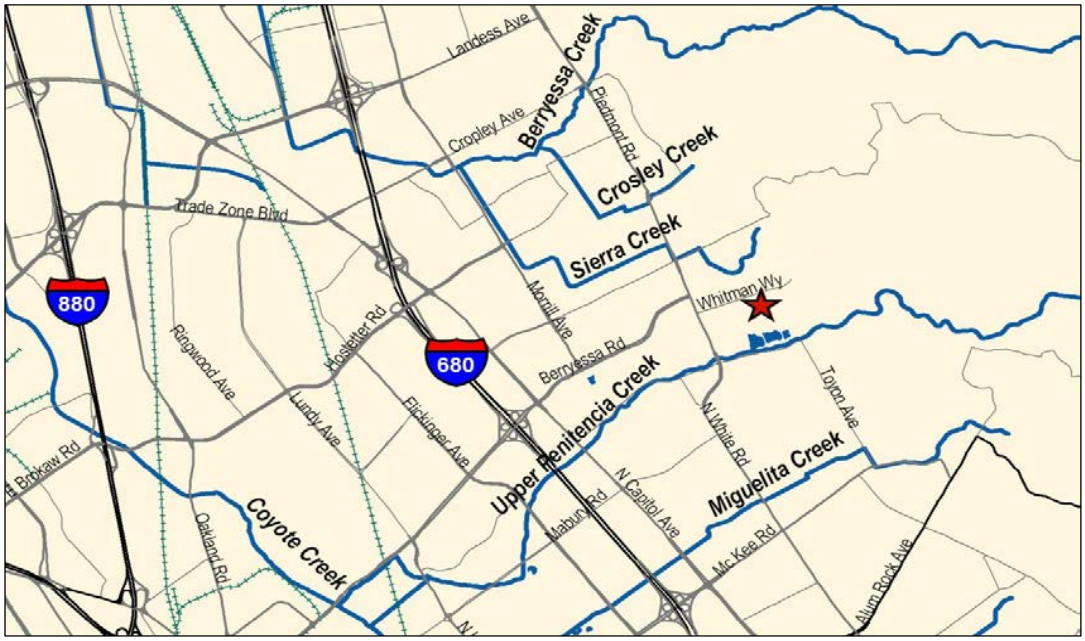
View of the Delivery Main for the Penitencia Water Treatment Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs seismic improvements to the delivery main and force main junctions to prevent catastrophic failure due to an earthquake by accomplishing the following objectives:

- Perform a structural survey of the Penitencia Vault and Penitencia Delivery Main (PDM) Effluent Vault to ascertain the existing condition, their life expectancy, and whether any changes are necessary to accommodate the seismic retrofit project.
- Perform a seismic retrofit to the PDM, Penitencia Force Main (PFM), South Bay Aqueduct (SBA), and the Finished Water Meter Vault to accommodate both the creeping and potentially extensive seismically-induced movements of the active landslide over a 50-year design life. The Penitencia Valut is no longer necessary and will be demolished.

PROJECT LOCATION

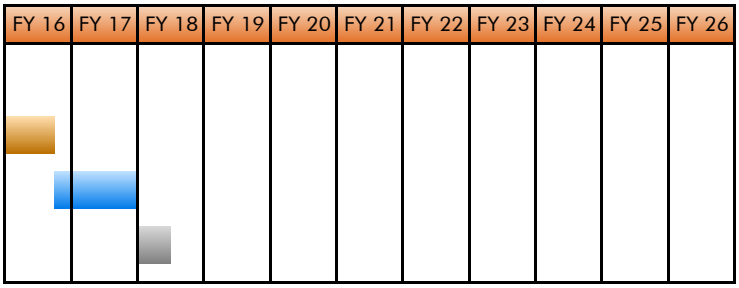


★ Project Location

SCHEDULE & STATUS

July 2012 to September 2017

Phase	Cost
Plan	1,881
Design	1,747
Construct	26,581
Closeout	20
	30,229



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	1,427	4,990	4,242	33	0	0	0	0	10,692
with inflation	1,427	4,990	4,242	36	0	0	0	0	10,695
92224001-Penitencia Force Main Seismic Retrofit	2,105	9,879	8,353	62	0	0	0	0	20,399
with inflation	2,105	9,879	8,353	67	0	0	0	0	20,404
TOTAL:	3,532	14,869	12,595	95	0	0	0	0	31,091
Total with inflation	3,532	14,869	12,595	103	0	0	0	0	31,099

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
94384002-Penitencia Delivery Main Seismic Retrofit	1,785	8,047	3,415	843	36	0	0	0	0	10,711
92224001-Penitencia Force Main Seismic Retrofit	2,282	9,726	24	8,329	67	0	0	0	0	20,404
TOTAL	4,067	17,773	3,439	9,172	103	0	0	0	0	31,115

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $16,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

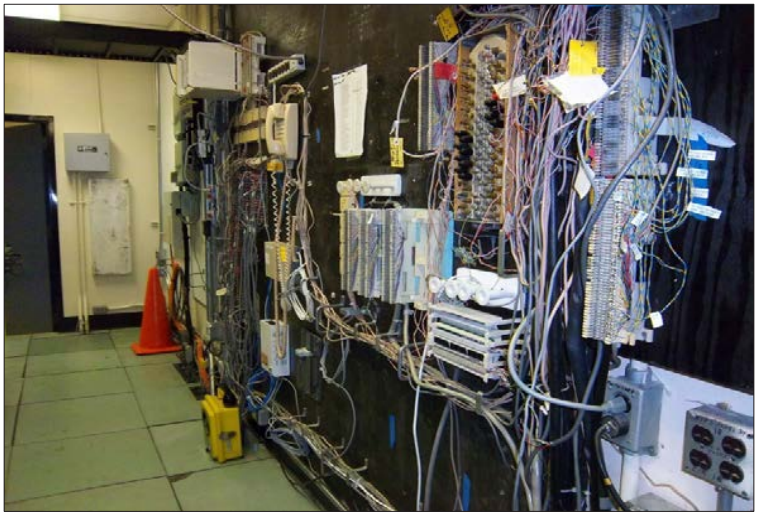
SCVWD Water Utility Enterprise Fund	31,115
Other Funding Source	0
Total	31,115

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	SCADA Remote Architecture and Communications Upgrade
Program	Water Supply – Transmission
Priority No.	75
Project No.	92374005
District Contact	Katherine Oven koven@valleywater.org



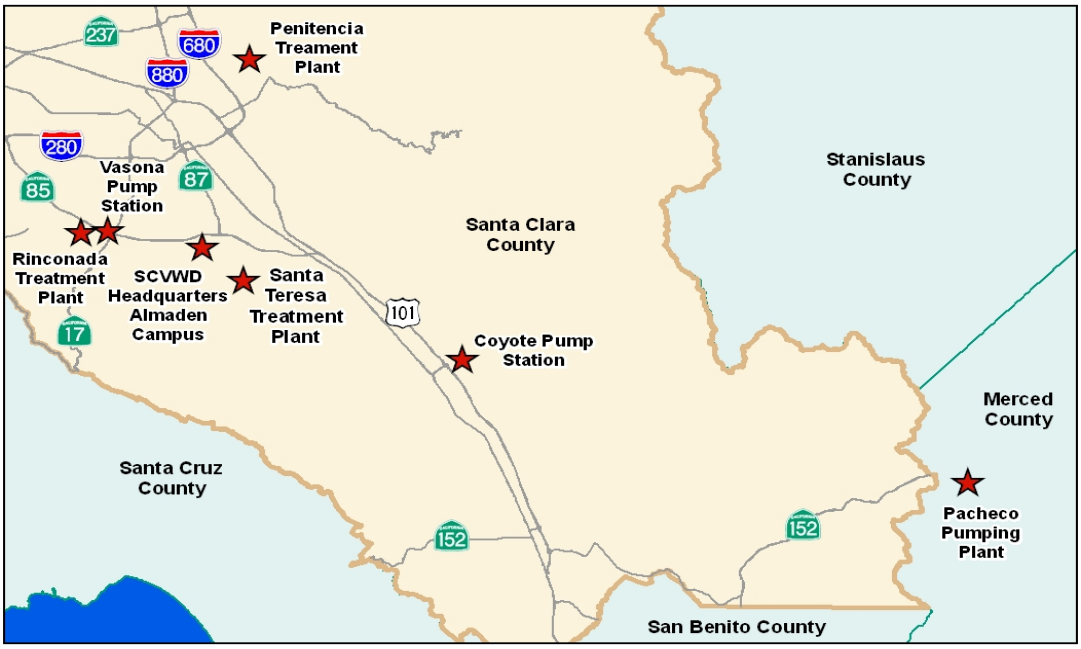
Raw Water Control Center Hub at Rinconada Water Treatment Plant similar to what will be installed at other facilities

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the back-up raw water control center and Process Control Systems (SCADA) telemetry to accomplish the following objectives:

- Complete the mobilizable raw water control center so it can be operated at any of the water treatment plants, pumping plants, or at District Headquarters/Almaden Campus.
- Upgrade the SCADA telemetry system to remove the single points of failure and to provide a robust and reliable telemetry system.

PROJECT LOCATION

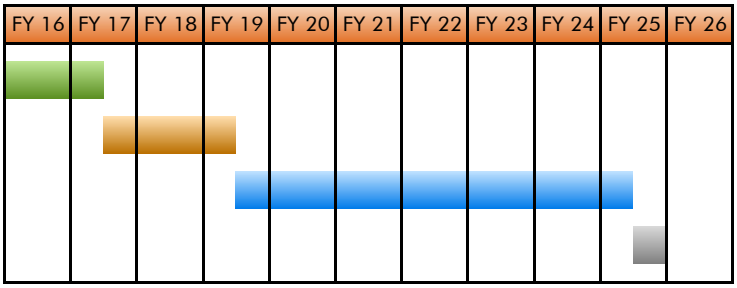


★ Project Location

SCHEDULE & STATUS

July 2015 to June 2025

Phase	Cost
Plan	576
Design	710
Construct	4,300
Closeout	100
	5,686



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	28	374	374	360	550	700	700	2,600	5,686
with inflation	28	374	374	389	619	819	852	3,477	6,931

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
92374005-SCADA Remote Architecture and Communications Upgrade	370	32	0	374	389	619	819	852	3,477	6,931

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,931
Other Funding Source	0
Total	6,931

OPERATING COST IMPACTS

The completion of this project is anitcipated to increase operating costs by approximately $80,440 per year, beginning in FY 2026 for operational support provided by control technicians, IT technicians, and SCADA engineers.

USEFUL LIFE: 25 Years

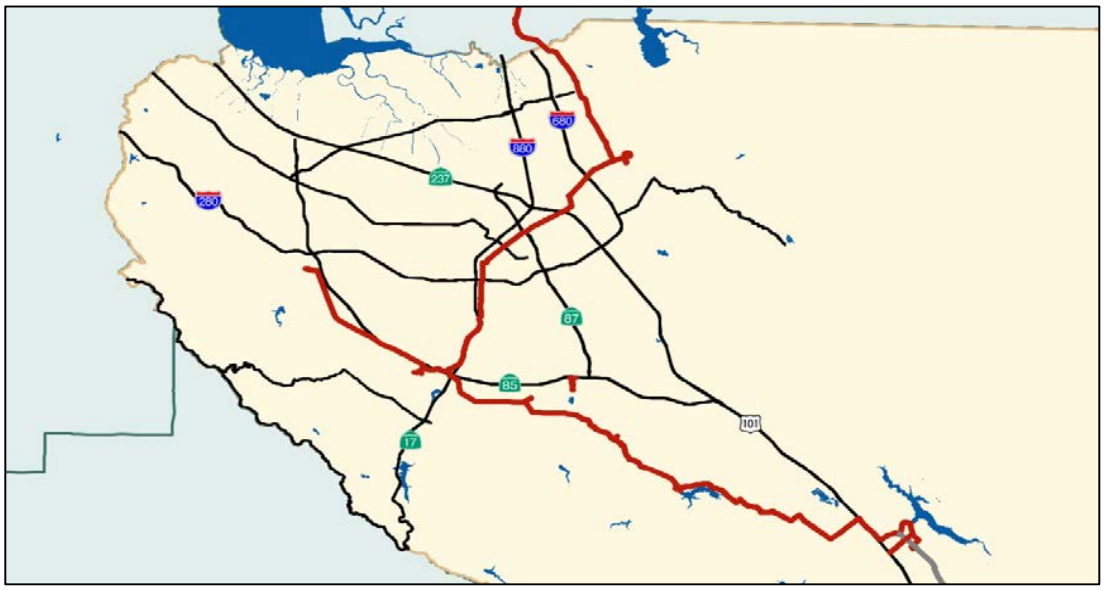
Project	**Small Capital Improvements, Raw Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	92764009
District Contact	Angela Cheung acheung@valleywater.org

Major repair and replacement of turnout roofs and similar small raw water capital projects will be done, per the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing raw water distribution facilities. These activities include identifying and fixing corrosion problems, replacing valves and other appurtenances and modifying water recharge facilities to avoid failure of the raw water transmission system and extend the life of the infrastructure. This project is part of the District's 10-year asset management program. No activities planned for FY 2017.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	38	0	106	0	45	0	2,240	2,429
with inflation	n/a	38	0	115	0	53	0	3,438	3,643

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	38	0	0	115	0	53	0	3,438	3,643

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	3,643
Other Funding Source	0
Total	**3,643**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

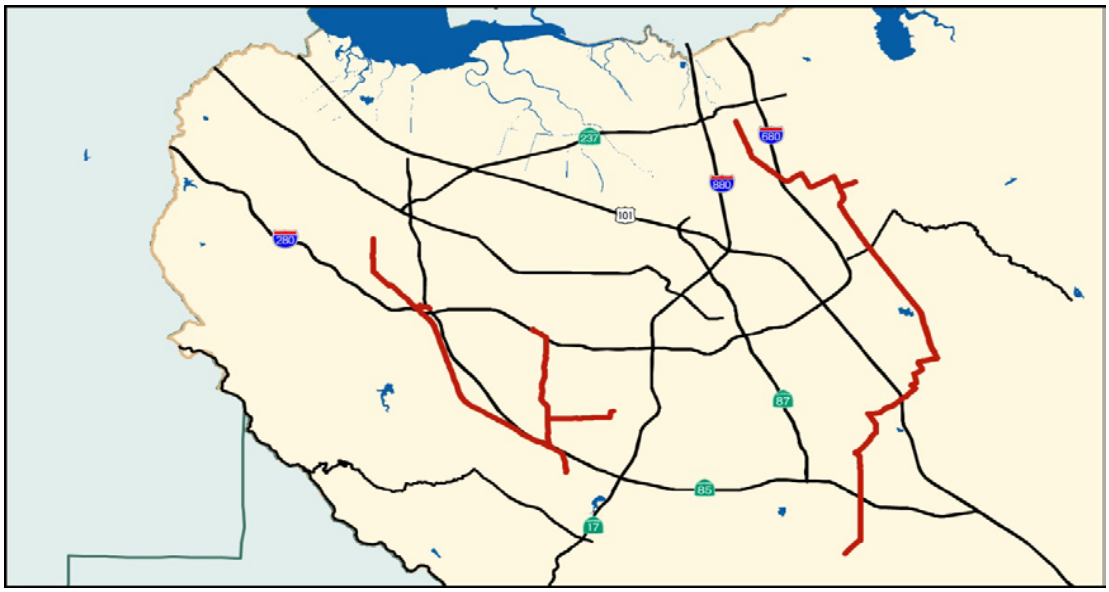
Project	**Small Capital Improvements, Treated Water Transmission**
Program	Water Supply – Transmission
Priority No.	73
Project No.	94764006
District Contact	Angela Cheung acheung@valleywater.org

Small Capital projects at treated water transmission facilities, similar to this new valve installation in the Piedmont Line Valve Vault, will be done, per the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing treated water distribution facilities, such as identifying and treating corrosion problems, replacing valves and other appurtenances and repairing or adding turnouts to avoid failure of the treated water transmission system and to extend the life of the infrastructure. This project is part of the District's 10-year asset management program.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	56	75	0	0	0	131
with inflation	n/a	0	0	61	84	0	0	0	145

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	0	0	0	61	84	0	0	0	145

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	145
Other Funding Source	0
Total	**145**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Vasona Pumping Plant Upgrades**
Program	Water Supply – Transmission
Priority No.	68
Project No.	92264001
District Contact	Katherine Oven koven@valleywater.org

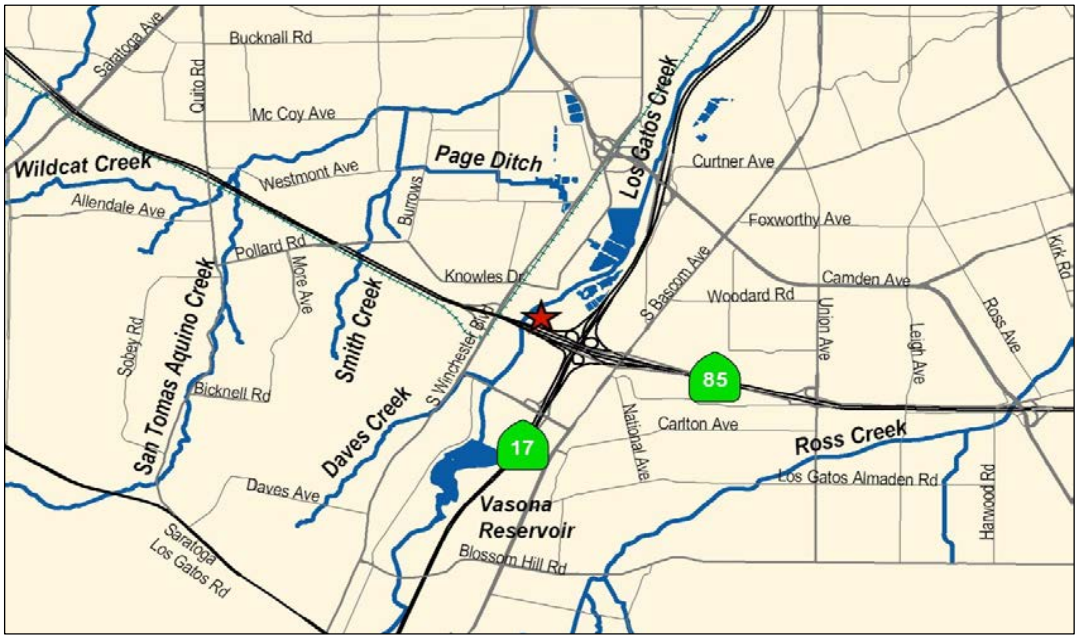
Vasona Pumping Plant Pump

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Vasona Pump Station, including replacing aging pumps, motors, drives, valves, actuators, and electrical and control systems that have reached the end of their useful life; and adding one redundant pump. The project will accomplish the following objectives:

- Eliminate the risk of failure by replacing assets that have reached the end of their useful life, including four pumps (two 200 horsepower, two 400 horsepower) and associated motors, drives, electrical and control systems, as well as pump discharge and suction valves and actuators.
- Increase operational flexibility and prepare for future capacity needs by adding one redundant pump and increasing the size of the two 200 horsepower pumps.

PROJECT LOCATION

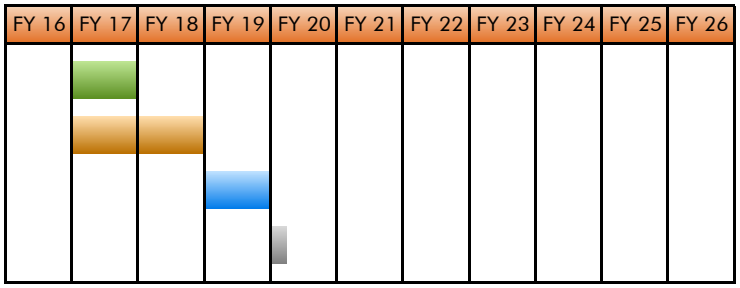


★ Project Location

SCHEDULE & STATUS

July 2016 to September 2020

Phase	Cost
Plan	570
Design	2,360
Construct	15,600
Closeout	70
	18,600



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
92264001-Vasona Pumping Plant Upgrades	0	0	119	1,221	1,590	15,600	70	0	18,600
with inflation	0	0	119	1,321	1,789	17,673	85	0	20,987

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
92264001-Vasona Pumping Plant Upgrades	0	0	0	119	1,321	1,789	17,673	85	0	20,987

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	20,987
Other Funding Sources	0
Total	20,987

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $70,000 per year beginning in FY 2021.

USEFUL LIFE: 50 years

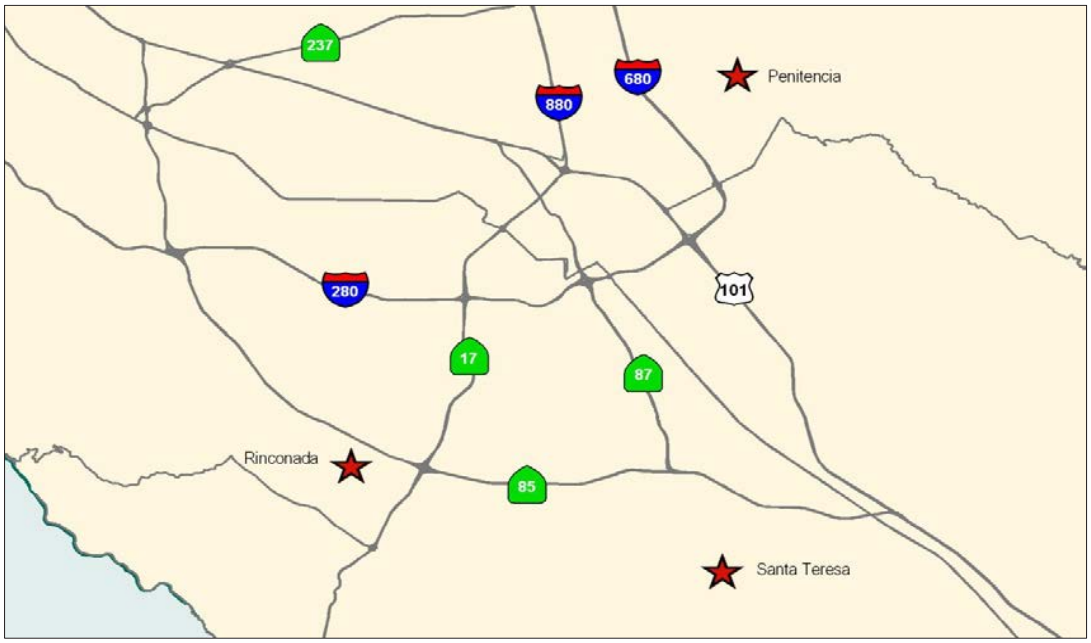
Project	**Fluoridation at Water Treatment Plants**
Program	Water Supply – Treatment
Priority No.	51
Project No.	93084011
District Contact	Katherine Oven koven@valleywater.org

Chemical storage tank and associated hardware will be installed at the water treatment plants for the fluoridation process

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements at the water treatment plants to provide fluoridation facilities that will include fluorosilicic acid storage tanks, tank foundations, chemical feed facilities, spill containment, storage and feed equipment areas, piping, online fluoride analyzers, and accessories.

PROJECT LOCATION

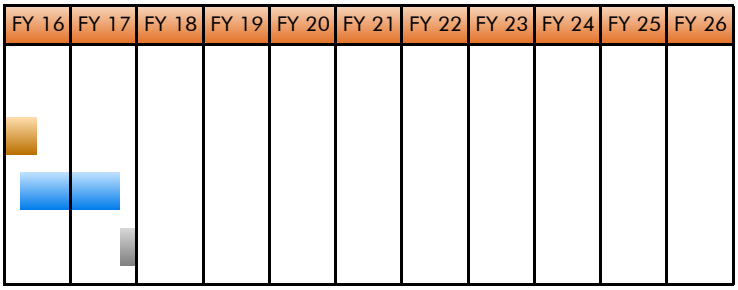


★ Project Location

SCHEDULE & STATUS

September 2013 to June 2017

Phase	Cost
Plan	230
Design	885
Construct	8,210
Closeout	85
	9,410



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93084011-Fluoridation at Water Treatment Plants	1,156	5,327	3,012	0	0	0	0	0	9,495
with inflation	1,156	5,327	3,012	0	0	0	0	0	9,495

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93084011-Fluoridation at Water Treatment Plants	1,148	5,338	3	3,009	0	0	0	0	0	9,495

Adjusted Budget includes adopted budget plus a planned budget adjustment for $11,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	7,095
The Health Trust	1,000
First 5 of Santa Clara County	900
California Dental Association Foundation	500
Total	9,495

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1,000,000 per year, beginning in FY 2018.

USEFUL LIFE:

Fluoride System: 10 years
Bulk Storage Tanks: 20 years

Project IRP2 WTP Operations Buildings Seismic Retrofit
Program Water Supply - Treatment **Priority No.** 70
District Contact Katherine Oven koven@valleywater.org **Project No.** 93764003

The RWTP control building is one of the four buildings that will be studied and possibly retrofitted to meet safety requirements

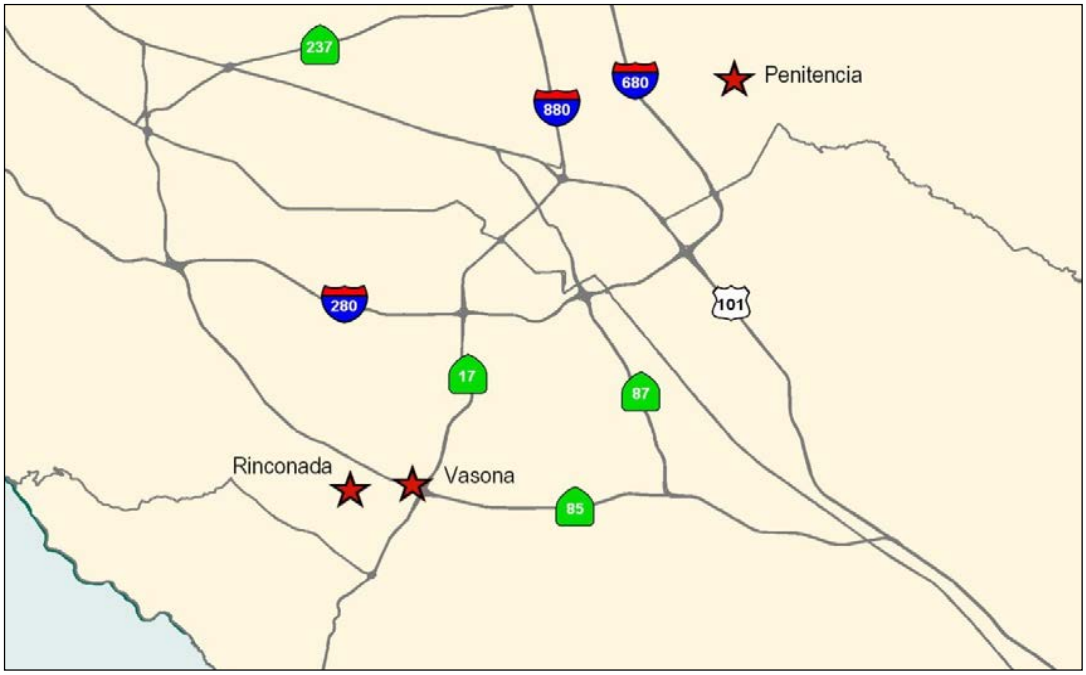
The PWTP control building is another of the four buildings that will be studied and possibly retrofitted to meet safety requirements

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements, including seismic retrofitting of two water treatment plant operations buildings and two buildings at the Vasona Pump Station that were built prior to 1980, as defined in the Water Infrastructure Reliability Plan, Portfolio 2 (IRP2), to ensure a healthy and safe work environment for employees and provide for continued functionality of these critical facilities after a major earthquake.

In addition, this Project will consider some non-structural elements of the Rinconada Water Treatment Plant (RWTP) Control Building, such as space reallocation, Americans with Disablities Act (ADA) improvements, and heating, ventilation, and air conditioning (HVAC) system rehabilitation.

PROJECT LOCATION

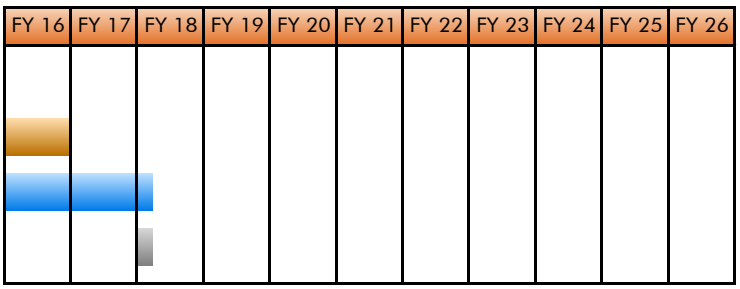


Project Location

SCHEDULE & STATUS

January 2008 to September 2017

Phase	Cost
Plan	1,403
Design	2,934
Construct	11,356
Closeout	70
	15,763



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	16,178	4,130	1,482	70	0	0	0	0	21,860
with inflation	16,178	4,130	1,482	76	0	0	0	0	21,866

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93764003-IRP2 WTP Operations Buildings Seismic Retrofit	19,686	1,306	684	798	76	0	0	0	0	21,866

Adjusted Budget includes adopted budget plus a planned budget adjustment of $600,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	21,162
Federal Emergency Management Agency (FEMA)	704
Total	**21,866**

OPERATING COST IMPACTS

Completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not alter the existing modes of operation. However, seismic retrofit will reduce or avoid structural damages and reduce the cost of post-earthquake repairs.

USEFUL LIFE: 50+ Years

Project	**PWTP Clearwell Recoating and Repair**
Program	Water Supply – Treatment
Priority No.	68
Project No.	93234043
District Contact	Katherine Oven koven@valleywater.org

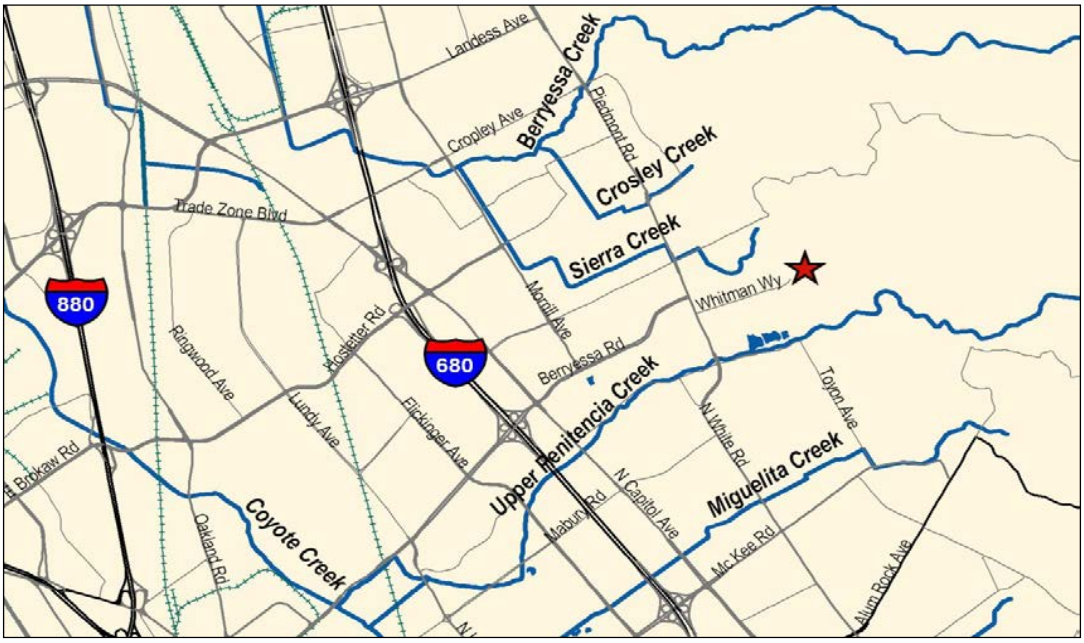
Active corrosion of the rafters and rafter support

PROJECT DESCRIPTION

This project plans, designs, and constructs corrosion repairs to the existing clearwell at Penitencia Water Treatment Plant (PWTP) to accomplish the following objectives:

- Extend the life of the PWTP Clearwell by replacing the roof and removing as much corrosion as possible from the walls and recoating surfaces as necessary.
- Replace the existing roof and supports to address the corrosion as identified in the January 2009 report by Bay Area Coating Consultants.

PROJECT LOCATION

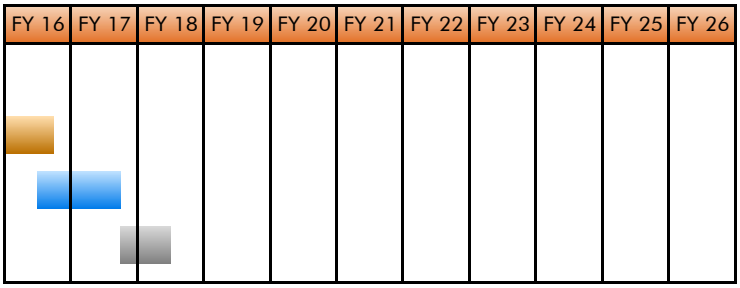


★ Project Location

SCHEDULE & STATUS

July 2010 to June 2017

Phase	Cost
Plan	530
Design	535
Construct	5,153
Closeout	15
	6,233



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93234043-PWTP Clearwell Recoating and Repair	1,241	2,085	3,008	110	0	0	0	0	6,444
with inflation	1,241	2,085	3,008	119	0	0	0	0	6,453

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93234043-PWTP Clearwell Recoating and Repair	4,516	1,403	2,593	550	119	0	0	0	0	6,588

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately $135,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,588
Other Funding Source	0
Total	6,588

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs as it does not alter existing modes of operation.

USEFUL LIFE: 15 Years

Project PWTP Residuals Management
Program Water Supply - Treatment
District Contact Katherine Oven koven@valleywater.org
Priority No. 57
Project No. 93C40390

Existing belt press to be replaced with new residuals management facility

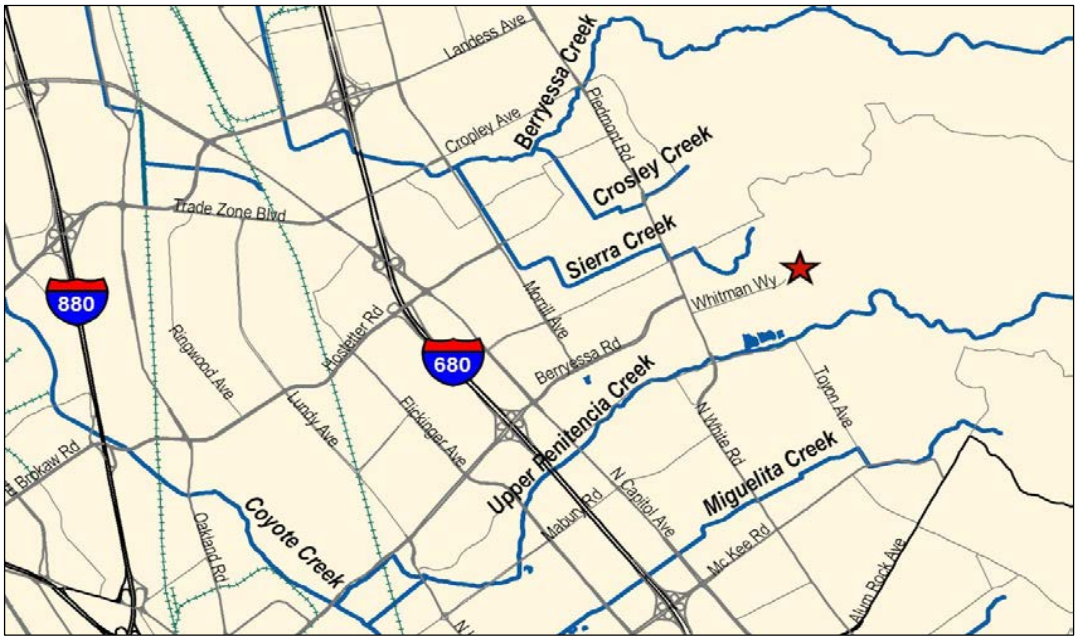
Existing belt press to be replaced with new residuals management facility

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Penitencia Water Treatment Plant (PWTP) residuals management process to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize or eliminate (existing) operational constraints and impacts to the drinking water treatment process.
- Minimize risk of discharge violations.
- Improve the reliability of PWTP.

PROJECT LOCATION

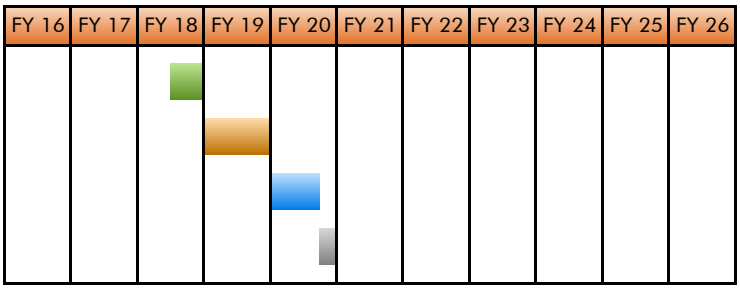


★ Project Location

SCHEDULE & STATUS

January 2018 to June 2020

Phase	Cost
Plan	650
Design	1,300
Construct	6,925
Closeout	-
	8,875



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93C40390-PWTP Residuals Management	0	0	0	650	1,300	6,925	0	0	8,875
with inflation	0	0	0	703	1,462	7,835	0	0	10,001

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93C40390-PWTP Residuals Management	0	0	0	0	703	1,462	7,835	0	0	10,001

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	10,001
Other Funding Sources	0
Total	10,001

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project RWTP FRP Residuals Management
Program Water Supply - Treatment **Priority No.** 87
District Contact Katherine Oven koven@valleywater.org **Project No.** 93294051

Centrifuge for mechanical dewatering of sludge

New Gravity Thickeners and Mix Tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes, consistent with the Facility Renewal Program (FRP) to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize risk of discharge violations.
- Improve the reliability of RWTP.

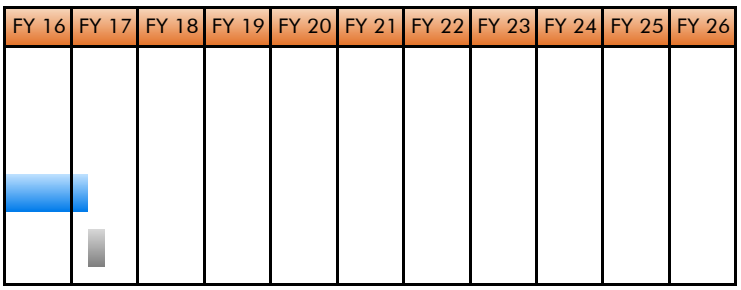
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2008 to December 2016

Phase	Cost
Plan	1,434
Design	2,312
Construct	17,510
Closeout	95
	21,351



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93294051-RWTP FRP Residuals Management	24,720	1,588	118	0	0	0	0	0	26,426
with inflation	24,720	1,588	118	0	0	0	0	0	26,426

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93294051-RWTP FRP Residuals Management	26,022	286	0	118	0	0	0	0	0	26,426

Adjusted Budget includes adopted budget plus a planned budget adjustment of $212,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	26,426
Other Funding Source	0
Total	26,426

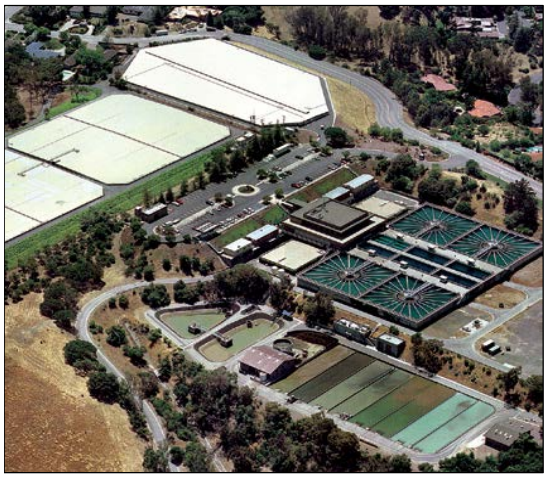
OPERATING COST IMPACTS

The completion of this project is anticipated to decrease annual operating costs by approximately $200,000 per year starting in 2018.

USEFUL LIFE:

Structures – 50 Years; Mechanical Equipment – 15 Years; Electrical Equipment – 10 Years

Project RWTP Reliability Improvement
Program Water Supply - Treatment
District Contact Katherine Oven koven@valleywater.org
Priority No. 91
Project No. 93294057



Aerial view of the
Rinconada Water Treatment Plant facing west

Artist rendering of the aerial view of the Rinconada
Water Treatment Plant facing south after construction

PROJECT DESCRIPTION

This project plans, designs, and constructs new facilities at Rinconada Water Treatment Plant (RWTP) that will improve plant reliability by accomplishing the following objectives:

- Construct a new raw water ozonation facility.
- Construct a new flocculation and plate settler clarification facility.
- Implement a dual media filtration system.
- Increase plant capacity to 100 million gallons per day (MGD).

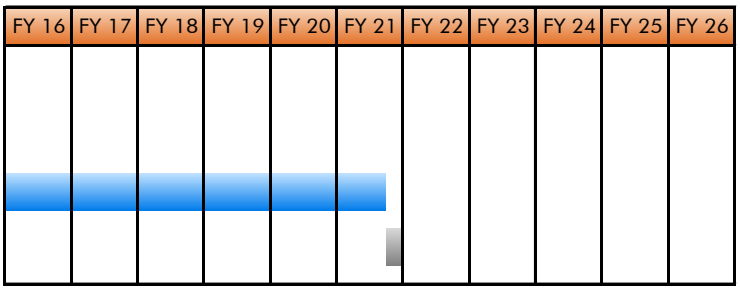
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2009 to June 2021

Phase	Cost
Plan	1,801
Design	11,352
Construct	223,630
Closeout	120
	236,903



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93294057-RWTP Reliability Improvement	25,764	45,752	44,712	43,900	43,900	44,930	120	0	249,078
with inflation	25,764	45,752	44,712	44,496	44,811	46,345	146	0	252,025

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93294057-RWTP Reliability Improvement	26,507	45,009	0	44,712	44,496	44,811	46,345	146	0	252,025

Adjusted Budget includes adopted budget plus a planned budget adjustment of $7,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	252,025
Other Funding Source	0
Total	252,025

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1.4 million per year, beginning in FY 2022. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE:

Media – 20 Years; Structures – 50 Years; Equipment – 15 Years

Project	**RWTP Treated Water Valves Upgrade**
Program	Water Supply – Treatment
Priority No.	87
Project No.	93294056
District Contact	Katherine Oven koven@valleywater.org

Example of a valve to be replaced or upgraded

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) including seismically strengthening the chemical storage structures; replacing/upgrading the valves and appurtenances used to control treated water at the clearwells and the Ronconada Reservoir; repairing a damaged baffle wall in the Rinconada Reservoir; and installing a 48-inch magnetic flow meter on the treatment plant's treated water effluent pipeline. Consistent with the Facility Renewal Program (FRP), this project will accomplish the following objectives:

- Ensure plant operational reliability.
- Improve ability to maintain the plant.
- Allow for better isolation of the treated water control valves for future work.
- Achieve greater accuracy in measuring treated water deliveries.

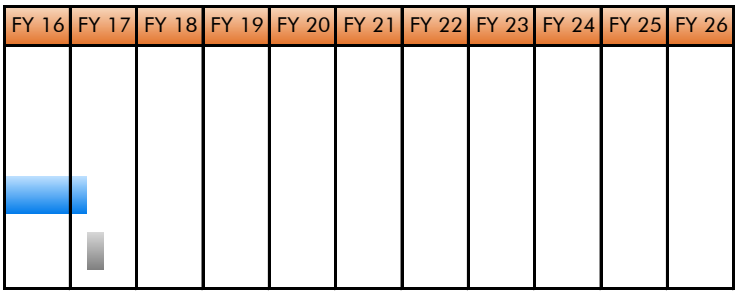
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2009 to December 2016

Phase	Cost
Plan	465
Design	1,476
Construct	6,417
Closeout	33
	8,391



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93294056-RWTP Treated Water Valves Upgrade	7,736	617	73	0	0	0	0	0	8,426
with inflation	7,736	617	73	0	0	0	0	0	8,426

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93294056-RWTP Treated Water Valves Upgrade	8,075	296	18	55	0	0	0	0	0	8,426

Adjusted Budget includes adopted budget plus a planned budget adjustment of $2,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,426
Other Funding Source	0
Total	**8,426**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operations.

USEFUL LIFE: 40 Years

Project	**Small Capital Improvements, Water Treatment**
Program	Water Supply – Treatment
Priority No.	73
Project No.	93764004
District Contact	Angela Cheung acheung@valleywater.org

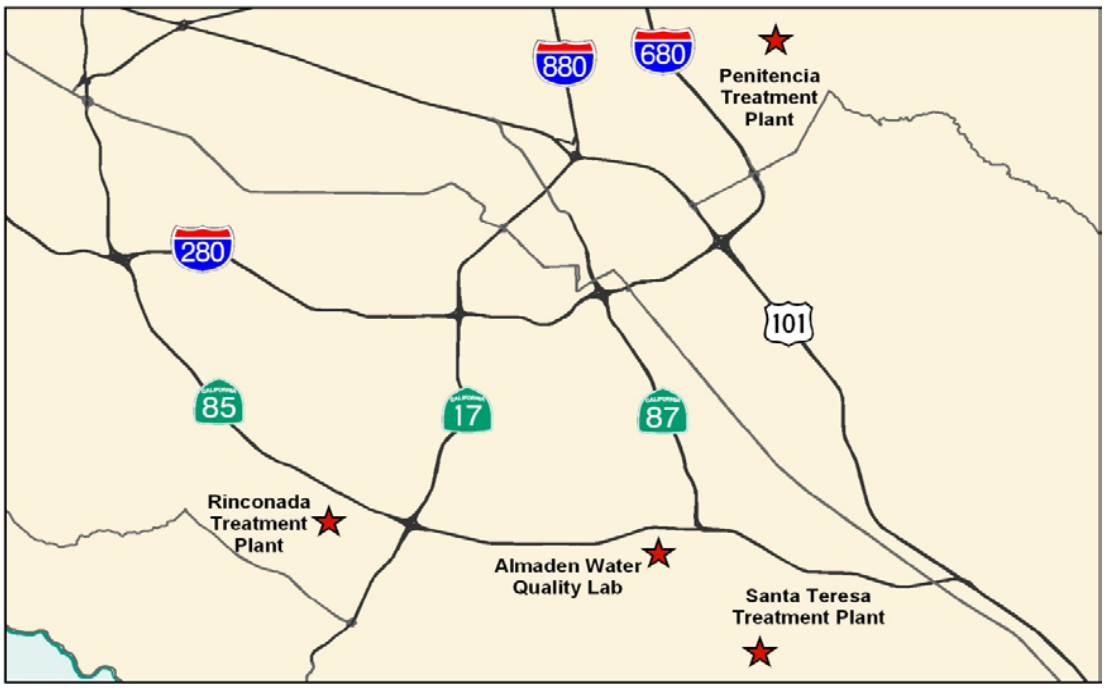
Sludge pond sediment removal at Santa Teresa Water Treatment Plant

PROJECT DESCRIPTION

This project provides resources for small capital improvements that replace or extend the life of an asset. This project implements a systematic approach of equipment replacement and renewal at the three water treatment plants and laboratory by designing and constructing improvements identified as part of the District's 10-year asset management program. Typical activities included in this project include pump, motor, instrumentation and valve replacement; chemical tank repairs; and large-scale renewal and replacement activities like clarifier mechanism overhaul and replacement. Planned projects to complete in FY 2017 for Santa Teresa Water Treatment Plant (STWTP), Penitencia Water Treatment Plan (PWTP), Rinconada Water Treatment Plant (RWTP, West Pipeline, and Silicon Valley Advanced Water Purification Center (SVAWPC) include:

- Provide electrical and control system engineering services for District SCADA standards development, Operational Data Management System Upgrade, and other HMI and PLC technical upgrades.
- Purchase and install Water Quality Lab Instrumentation.
- Complete Small Capital Projects at STWTP, RWTP, PWTP and Campbell Well Field.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	3,509	2,831	723	4,858	3,045	2,870	27,500	45,336
with inflation	n/a	3,509	2,831	782	5,465	3,562	3,492	41,768	61,409

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
93764004-Small Capital Improvements, Water Treatment	n/a	3,509	0	2,831	782	5,465	3,562	3,492	41,768	61,409

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Excess funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	61,409
Other Funding Source	0
Total	61,409

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**PureWater Silicon Valley**
Program	Water Supply – Recycled Water
Priority No.	81
Project No.	91304001s
District Contact	Katherine Oven koven@valleywater.org

Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

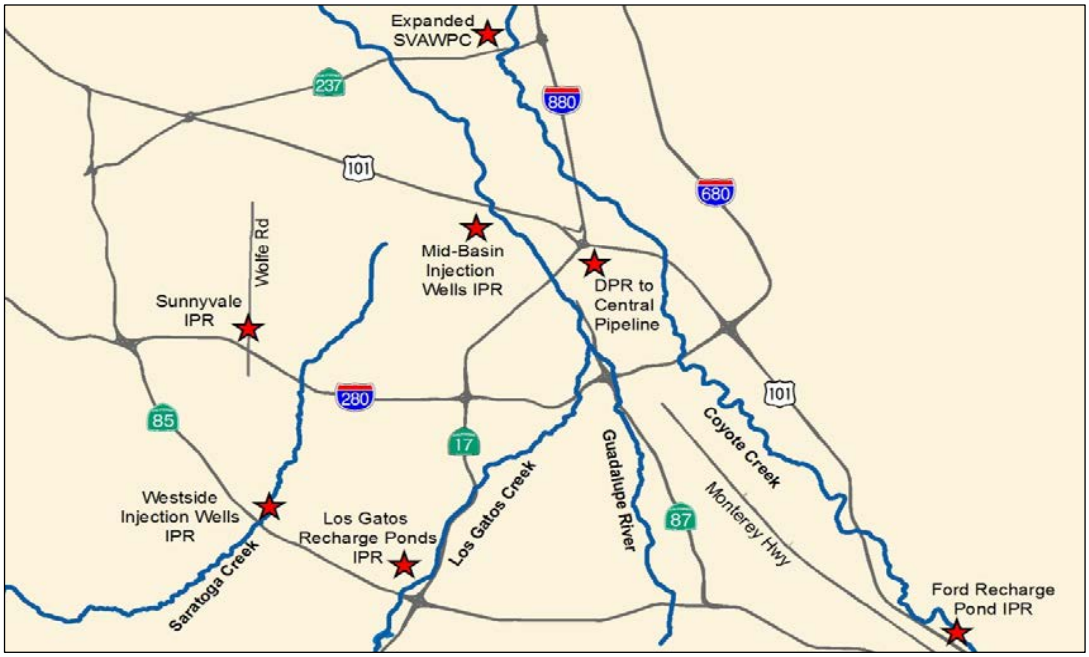
This project plans, designs, and constructs new infrastructure proposed in the District's 2012 Water Supply and Infrastructure Master Plan to accomplish the following objectives:

- Expand the District's long-term water supply portfolio.
- Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- Expansion of the Silicon Valley Advanced Water Purification Center.
- Installation of pipelines to convey advanced purified water to the District's existing groundwater recharge ponds.
- Installation of purified water injection wells at strategic locations to better manage the groundwater basin.
- Construction and operation of an advanced water purification center for groundwater recharge at Ford Ponds.
- Partnership with the City of Sunnyvale to implement advanced water purification facilities at the City's wastewater treatment plant.

PROJECT LOCATION

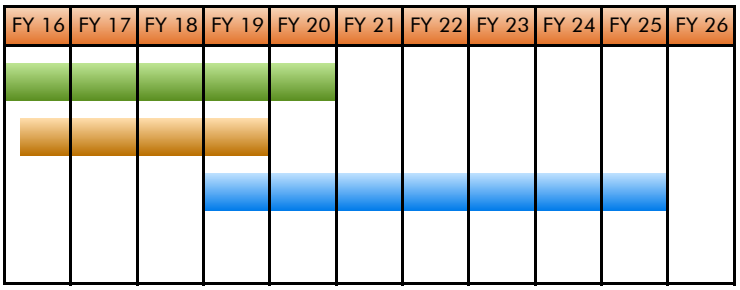


★ Project Location

SCHEDULE & STATUS

April 2015 to June 2025

Phase	Cost
Plan	23,395
Design	60,412
Construct	739,962
Closeout	-
	823,769



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	951	16,500	3,120	500	500	500	0	0	22,071
with inflation	951	16,500	3,120	541	562	585	0	0	22,259
91284009 - Silicon Valley Advanced Water Purification Center Expansion	18	2,000	4,228	14,972	48,500	117,000	107,000	6,000	299,718
with inflation	18	2,000	4,228	16,194	73,528	118,189	108,517	6,266	328,939
91384001 - Purified Water Pipelines	0	0	3,351	10,997	36,600	89,000	82,000	4,500	226,448
with inflation	0	0	3,351	11,894	55,712	89,849	83,083	4,686	248,576
91C40389 - Other IPR Project Elements	0	0	0	0	0	0	0	276,212	276,212
with inflation	0	0	0	0	0	0	0	344,952	344,952
TOTAL	**969**	**18,500**	**10,699**	**26,469**	**85,600**	**206,500**	**189,000**	**286,712**	**824,449**
with inflation	**969**	**18,500**	**10,699**	**28,629**	**129,802**	**208,623**	**191,600**	**355,904**	**944,726**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY15**	**FY16**		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	2,000	16,481	1,030	2,090	541	562	585	0	0	22,259
91284009 - Silicon Valley Advanced Water Purification Center Expansion	0	2,018	0	4,228	16,194	73,528	118,189	108,517	6,266	328,939
91384001 - Purified Water Pipelines	0	0	0	3,351	11,894	55,712	89,849	83,083	4,686	248,576
91C40389 - Other IPR Project Elements	0	0	0	0	0	0	0	0	344,952	344,952
TOTAL	**2,000**	**18,499**	**1,030**	**9,669**	**28,629**	**129,802**	**208,623**	**191,600**	**355,904**	**944,726**

Adjusted Budget includes adopted budget plus a planned budget adjustment of $3,299,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	944,726
Other Funding Sources	0
Total	**944,726**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: Not Available

Project Silicon Valley Advanced Water Purification Center
Program Water Supply - Recycled Water **Priority No.** 17
District Contact Katherine Oven koven@valleywater.org **Project No.** 91184008

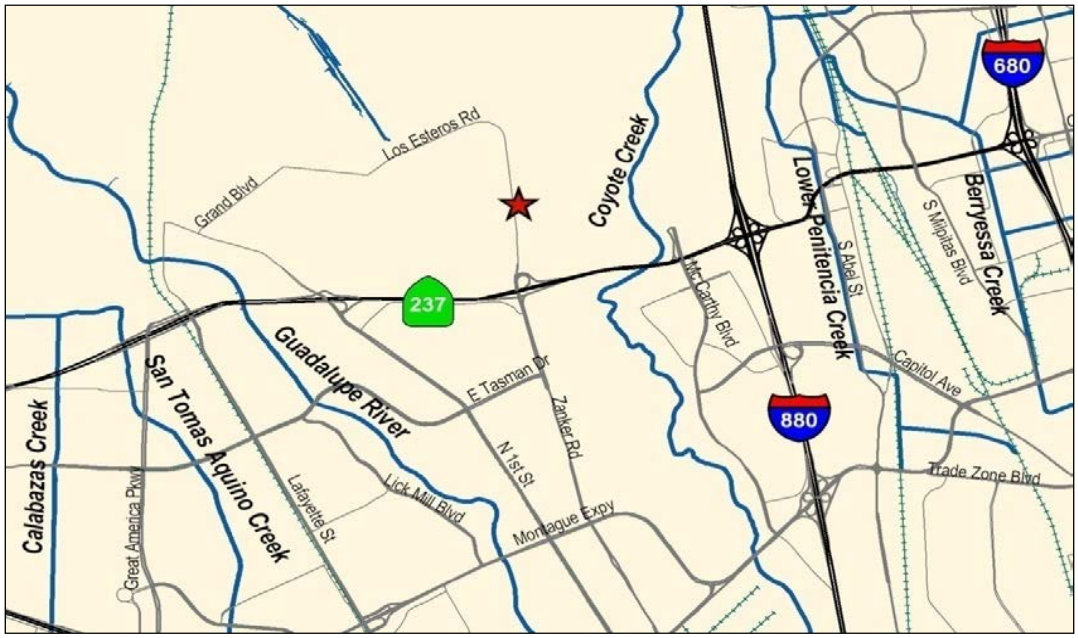
Panoramic view of the Silicon Valley Advanced Water Purification Center

PROJECT DESCRIPTION

This project plans, designs, and constructs a 10-mgd (million-gallons-per-day) Silicon Valley Advanced Water Purificaton Center (SVAWPC) within the footprint of the South Bay Water Recycling's Water Pollution Control Plant (WPCP) in San Jose, to accomplish the following objectives:

- Improve recycled water quality to enhance marketability.
- Increase the operational reliability and flexibility of recycled water.
- Retain existing customers who may have water quality (especially salinity) issues.
- Improve public acceptance of recycled water.
- Maximize water recycling alternatives.
- Reduce fresh water effluent discharges into San Francisco Bay to protect endangered species.
- Increase tertiary treatment capacity for the water pollution control plant.
- Preserve options for future groundwater recharge and reuse.

PROJECT LOCATION

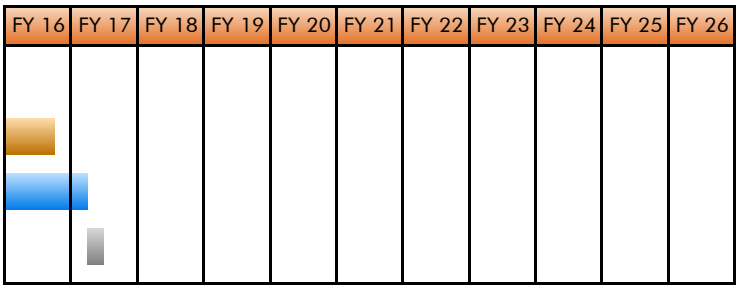


★ Project Location

SCHEDULE & STATUS

January 2004 to December 2016

Phase	Cost
Plan	2,672
Design	3,267
Construct	69,932
Closeout	92
	75,963



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91184008-Silicon Valley Advanced Water Purification Center	75,959	721	135	0	0	0	0	0	76,815
with inflation	75,959	721	135	0	0	0	0	0	76,815

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91184008-Silicon Valley Advanced Water Purification Center	75,928	838	86	49	0	0	0	0	0	76,815

Adjusted Budget includes adopted budget plus a planned budget adjustment of $247,000.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	54,770
City of San Jose	8,500
California Department of Water Resources - Prop 50	2,935
California Department of Water Resources - Prop 84	2,485
United States Bureau of Reclamation (USBR) ARRA	8,125
Total	**76,815**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase the District's operating costs by approximately $1.75 million per year, beginning in FY 2018. The City of San Jose will also be responsible for contributing the same amount to cover total annual operations costs of approximately $3.5 million. Total cost includes labor, membranes replacement, energy, UV lamp replacement, chemicals, and other necessary items.

USEFUL LIFE: 20-30 Years

Project	**South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Priority No.	17
Project No.	91094007s
District Contact	Katherine Oven koven@valleywater.org

Recycled water purple pipeline waiting to be laid during construction of Immediate Term project

PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan accepted in December 2004 to improve system redundancy, reliability, and capacity. The current Master Plan report presents a 20-year capital program for expanding water recycling in South County in three phases; Immediate Term, Short Term, and Long Term:

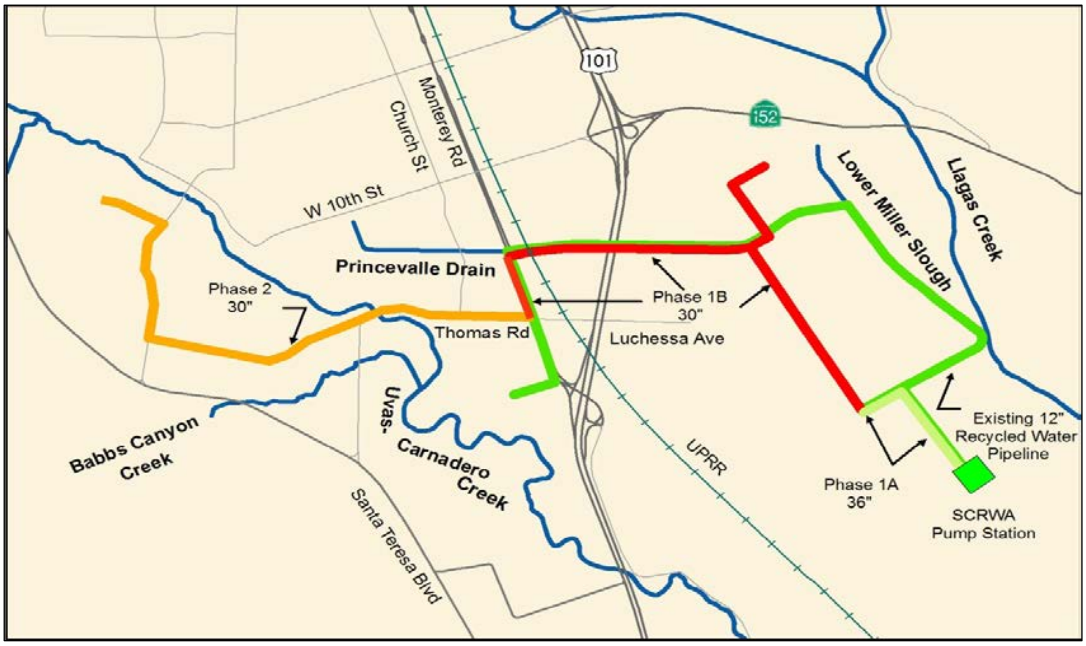
Completed:

- 91094007 Gilroy Pipelines and Reservoir (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the SCRWA treatment plant.
- 91094008 Gilroy Pipelines (Short Term) Phase 1A, installation of approximately 3000 feet of 30-inch and 36-inch pipeline.

Currently Underway:

- 91094009 Gilroy Pipelines (Short Term) Phase 1B/2A will construct an additional 14,000 linear feet of pipeline.
- 91094010 Gilroy Pipelines (Short Term) Phase 2 will be completed through cost-sharing opportunities with the City of Gilroy and land developers to construct approximately 3,900 linear feet of 30-inch diameter pipe.
- 91094010 Gilroy Pipelines (Long-Term) Phase 1 to be completed through cost-sharing opportunities with the land developers through coordination by the City of Gilroy to construct approximately 9,200 linear feet of 24-inch diameter pipe.

PROJECT LOCATION



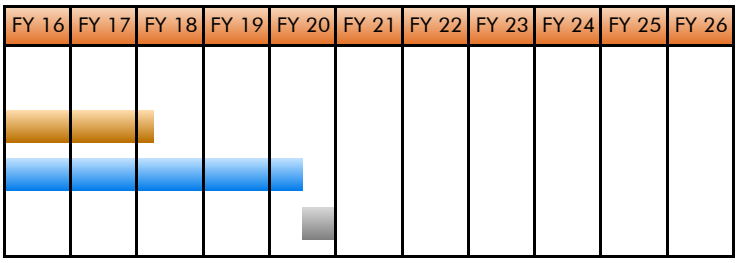
Project Location

SCHEDULE & STATUS

July 2009 to June 2020

The schedule chart shows Short-Term Phase 1B and Phase 2 projects only. The Immediate-Term and Short-Term Phase 1A projects are complete.

Phase	Cost
Plan	2,736
Design	7,361
Construct	33,395
Closeout	154
	43,646



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	3,257
with inflation	3,257	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	5,391
with inflation	5,391	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	6,978	1,406	18,416	169	0	0	0	0	26,969
with inflation	6,978	1,406	18,416	183	0	0	0	0	26,983
91094010-South County Recycled Water Pipeline - Short Term 2	108	318	6,964	420	320	320	0	0	8,450
with inflation	108	318	6,964	446	350	361	0	0	8,547
TOTAL	**15,734**	**1,724**	**25,380**	**589**	**320**	**320**	**0**	**0**	**44,067**
with inflation	**15,734**	**1,724**	**25,380**	**629**	**350**	**361**	**0**	**0**	**44,178**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	6,547	4,481	2,644	15,772	183	0	0	0	0	26,983
91094010-South County Recycled Water Pipeline - Short Term 2	2,000	6,108	7,682	0	0	78	361	0	0	8,547
TOTAL	**17,195**	**10,589**	**10,326**	**15,772**	**183**	**78**	**361**	**0**	**0**	**44,178**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	42,175
South County Regional Wastewater Authority	708
United States Bureau of Reclamation (USBR) ARRA	1,295
Total	**44,178**

OPERATING COST IMPACTS

Estimated District share of the operating and maintenance costs are $8,000 per year for the Immediate-Term phase, beginning in FY 2007 and an additional $25,000 for the Short-Term Phase 1, beginning in FY 2019. Increases for Immediate Term are primarily labor costs for operating the new 3mg reservoir and its pump station. Increases for Short Term are labor and materials to maintain the 42,000 feet of new pipeline, exercising valves and cathodic protection.

USEFUL LIFE: Pipelines – 50 Year; Pumps – 20 Years

Project	**Wolfe Road Recycled Water Facility**
Program	Water Supply – Recycled Water
Priority No.	39
Project No.	91244001
District Contact	Katherine Oven koven@valleywater.org

Artist's rendering of the new Apple campus and surrounding grounds that will be maintained using recycled water supplied by the Wolfe Road pipeline

PROJECT DESCRIPTION

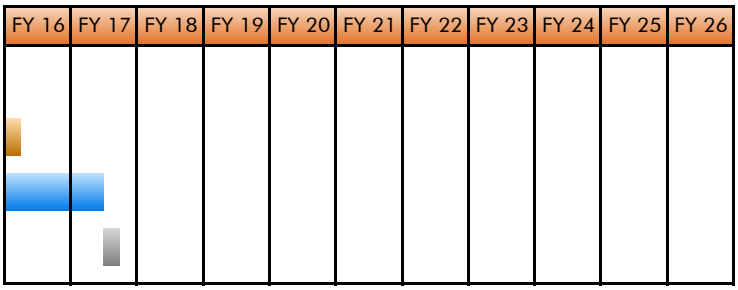
This project plans, designs, and constructs approximately 13,300 linear feet of pipeline along Wolfe Road to deliver recycled water to the west side of Sunnyvale and the new Apple campus in Cupertino.

PROJECT LOCATION

SCHEDULE & STATUS

September 2013 to January 2017

Phase	Cost
Plan	13
Design	1,675
Construct	16,050
Closeout	17
	17,755



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
91244001-Wolfe Road Recycled Water Facility	1,302	15,399	1,127	0	0	0	0	0	17,828
with inflation	1,302	15,399	1,127	0	0	0	0	0	17,828

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
91244001-Wolfe Road Recycled Water Facility	10,608	6,563	470	657	0	0	0	0	0	17,828

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,928
Apple Inc.	4,800
California Department of Water Resources	2,500
Cal Water	1,500
City of Sunnyvale	2,100
Total	**17,828**

OPERATING COST IMPACTS

The operating budget impact to operate and maintain the Wolfe Rd. Recycled Water Facilities is estimated to be $25,000 per year beginning in FY18, plus power costs of approximately $56 per each acre-foot of water delivered.

USEFUL LIFE: 50 Years

Flood Protection Capital Improvements

FLOOD PROTECTION OVERVIEW

The District manages approximately 800 miles of creeks in Santa Clara County to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations." The district's goals are further defined in E-3.1, "Provide natural flood protection for residents, businesses, and visitors" and E-3.2, "Reduce potential for flood damages." The 800 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. The District administers an asset management program for its flood protection infrastructure. The program includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

Fifty years of working for flood protection has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005 the District had provided flood protection to 93,253 of the 166,526 parcels in the flood plain and another 6,642 have been protected since then.

The voters in Santa Clara County have supported the District's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters approved a special parcel tax in 2000 and 2012 to fund the continuation of the District's flood protection capital improvements, specifically, moving upstream from the completed downstream work or starting new work on creeks that have not had flood protection work.

Lower Peninsula Watershed

Major Capital Improvements Completed

- Adobe Creek from El Camino to West Edith Ave.
- Barron Creek
- Matadero Creek from Palo Alto Flood Basin to Barron Creek
- Stevens Creek from Highway 101 to Homestead Road

Major Capital Improvements Identified in the CIP

- Palo Alto Flood Basin Structure Improvements
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)
- San Francisquito Creek from S.F. Bay to Searsville Dam (Clean, Safe Creeks/Safe, Clean Water)

West Valley Watershed

Major Capital Improvements Completed

- Calabazas Creek from Guadalupe Slough to Wardell Road
- San Tomas Creek from Southern Pacific Railroad to Cabrillo Avenue
- Saratoga Creek from San Tomas Creek to Lawrence Expressway

Major Capital Improvements Identified in the CIP

- Sunnyvale East and West Channels (Clean, Safe Creeks)

Guadalupe Watershed

Major Capital Improvements Completed

- Alamitos Creek
- Guadalupe River–Lower from Alviso Marina to Interstate 880
- Guadalupe River–Downtown from Interstate 880 to Interstate 280

Major Capital Improvements Identified in the CIP

- Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (Clean, Safe Creeks/Safe, Clean Water)

Coyote Watershed

Major Capital Improvements Completed

- Coyote Creek from S.F. Bay to Montague Expressway
- Lower Penitencia Creek from Coyote Creek to Tasman Drive
- Lower Silver Creek from Coyote Creek to Interstate 680 (Reaches 1-3, 4, 5 & 6A)
- Wrigley Ford Creek

Major Capital Improvements Identified in the CIP

- Berryessa Creek from Calaveras Boulevard to Old Piedmont Road (Clean, Safe Creeks)
- Berryessa Creek from Lower Penitencia Creek to Calaveras Boulevard
- Coyote Creek Montague Expressway to Interstate 280 (Clean, Safe Creeks)
- Lower Silver Creek from Interstate 680 to Lake Cunningham (Reaches 6B)
- Upper Penitencia Creek from Coyote Creek to Dorel Drive (Safe, Clean Water)

Uvas/Llagas Watershed

Major Capital Improvements Completed

- Llagas Creek–Lower from Pajaro River to Buena Vista Road
- Uvas Creek

Major Capital Improvements Identified in the CIP

- Llagas Creek Capacity Restoration from Buena Vista Road to Pajaro River
- Llagas Creek–Upper, Buena Vista Road to Llagas Road (Clean, Safe Creeks/Safe, Clean Water)

Multiple Watersheds

Major Capital Improvements Identified in the CIP

- Erosion Repair Program
- San Francisco Bay Shoreline (Safe, Clean Water)

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to ensure that the new flood protection projects proposed to be added to the Fiscal Year 2016-20 CIP reflect the Board's priorities. The priority criteria used are included in Appendix A.

A financial analysis of the Watershed and Steam Stewardship Fund and Safe, Clean Water Fund, the funding sources for flood protection capital improvements, was conducted to determine if there are limitations to funding all of the projects proposed for the Fiscal Year 2016-20 CIP. Results of the prioritization process and financial analysis are summarized in Appendix B.

The watersheds have benefited from higher than projected property tax revenue in fiscal years 2013, 2014 and 2015. The District will also receive $55 million from DWR to assist with construction of Lower Silver, Lower Berryessa, Upper Berryessa, and Lower Penitencia.

The voter approved Safe, Clean Water program will provide funding for some of the highest priority unfunded projects including:

- San Francisco Bay Shoreline - Design and Partial Construction of EIA 11 and Planning for other EIAs
- San Francisquito Creek, SF Bay to Middlefield Road
- Upper Guadalupe River, I-280 to Blossom Hill Road
- Upper Llagas Creek, Buena Vista Road to Wright Avenue
- Upper Penitencia Creek, Coyote to Dorel Drive

An implementation schedule for the Safe, Clean Water projects is available in Appendix G.

Delays in the federal funding for many of the USACE projects have extended the schedules beyond the dates committed by the District. Therefore, the District is evaluating the option of proceeding with the local funding option on several of these projects. Construction on a number of flood protection projects have been delayed due to either Federal funding issues or delays in receiving environmental permits.

The following high priority flood protection projects, unfunded or partially funded, are of major concern to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."

Partially Funded and Unfunded CIP Projects

- Coyote Creek, Montague Expressway to Interstate 280 (Construction is unfunded)
- San Francisco Bay Shoreline Project - except EIA 11 (Design and Construction is unfunded)
- San Francisquito Creek 100 year flood protection upstream of Highway 101
- Upper Berryessa Creek, Interstate 680 to Old Piedmont Road (unfunded; $20 million)

Flood Protection Capital Improvements

The following table is a project funding schedule for flood protection capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2015-16.

Flood Protection Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
	LOWER PENINSULA WATERSHED										
10394001	Palo Alto Flood Basin Tide Gate Structure Improvements	816	384	858	-	4,340	6	-	-	-	5,546
10244001s	Permanente Creek, SF Bay to Foothill Expressway	62,569	-	467	11,722	6,564	112	-	-	-	80,967
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	37,996	7,446	635	536	13,770	-	-	-	-	59,748
	WEST VALEY WATERSHED										
20194005	San Tomas Creek, Quito Road Bridge Replacement	292	271	-	-	129	-	-	-	-	692
26074002	Sunnyvale East and West Channels	37,878	8,299	31,960	-	23,217	56	-	-	-	69,450
	GUADALUPE WATERSHED										
30114002	Canoas Creek, Rodent Damage Repair	300	5,320	-	388	446	-	-	-	-	6,454
26154001s	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	112,579	302	11,776	8,615	25,613	10,115	12,024	8,522	6,764	184,534
	COYOTE WATERSHED										
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	28,839	4,003	-	14,747	1,500	940	825	-	-	50,854
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	55,191	31,530	26,474	27,176	1,268	251	309	161	-	115,886
26174043	Coyote Creek, Montague Expressway to Interstate 280	30,486	-	17,643	-	-	-	831	821	747	32,885
40264011	Cunningham Flood Detention Certification	4,458	-	1,183	3,829	2,216	675	129	-	-	11,307
40334005	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	4,807	1,993	-	2,891	14,503	6,829	351	365	400	32,139
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	95,304	1,484	3,440	710	276	56	11	-	-	97,841
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	17,514	385	2,173	-	5,023	6,134	6,379	16,175	17,142	68,752
	UVAS LLAGAS WATERSHED										
50284010	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	3,749	-	2,335	2,410	-	-	-	11,791
26174051s	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	80,480	53,034	91,476	1,071	5,860	25,000	6,125	-	-	171,570
	MULTIPLE WATERSHEDS										
40214021s	Erosion Repair Program (ERP)	-	-	-	4,251	4,000	-	2,000	11,000	49,000	70,251
00044026s	San Francisco Bay Shoreline (E7)	21,252	3,546	2,218	6,668	7,475	7,534	7,796	-	-	54,271
62084001	Small Capital Improvements - Regnart Creek	528	2,200	323	787	-	-	-	-	-	3,515
	TOTAL	598,335	120,197	194,375	83,391	118,535	60,118	36,780	37,044	74,053	1,128,453

The following table shows funding requirements from each funding source for flood protection capital improvements.

Flood Protection - Funding Sources ($K)

Fund Number	FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
12	Watershed Stream Stewardship Fund	222,849	44,724	39,878	40,032	29,513	27,227	8,800	11,526	49,400	434,071
26	Safe, Clean Water and Natural Flood Protection Fund	375,486	75,473	154,497	43,359	89,022	32,891	27,980	25,518	24,653	694,382
	TOTAL	598,335	120,197	194,375	83,391	118,535	60,118	36,780	37,044	74,053	1,128,453

FY 2015-16 Funds to be reappropriated

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Project	**Palo Alto Flood Basin Tide Gate Structure Improvements**
Program	Flood Protection - Lower Peninsula Watershed
Priority No.	48
Project No.	10394001
District Contact	Melanie Richardson mrichardson@valleywater.org

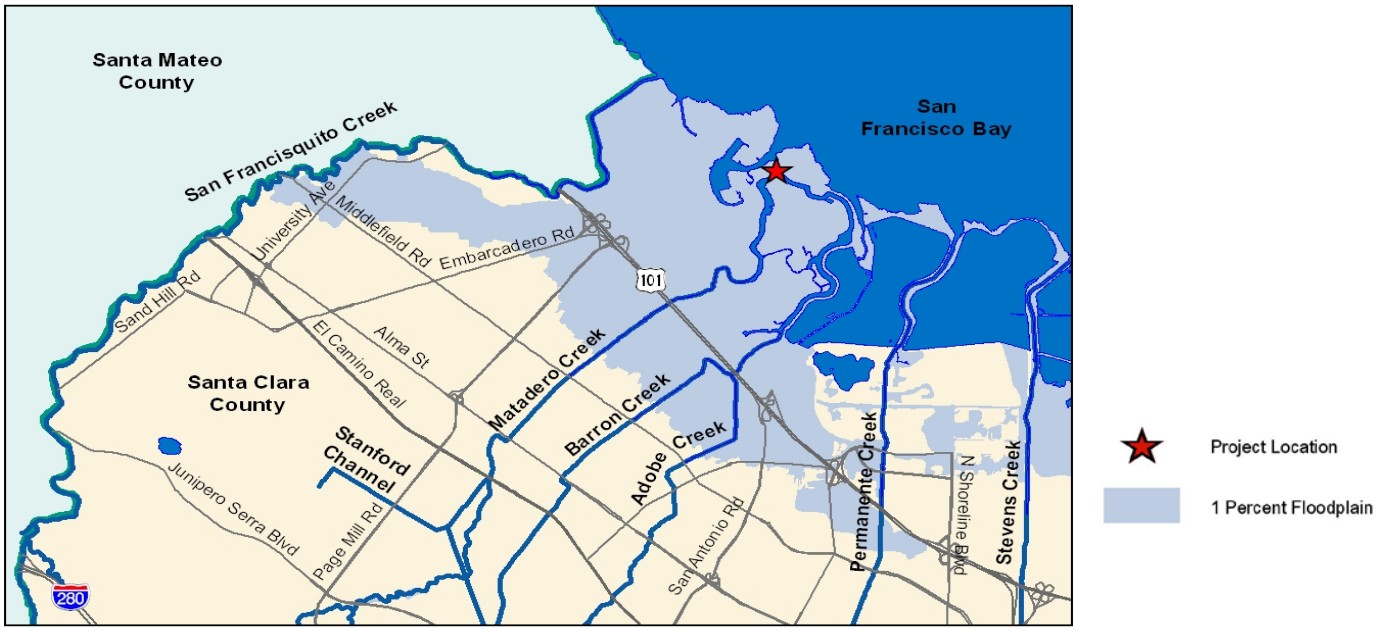
View from the west side of the Palo Alto tide gates facing east

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Palo Alto Flood Basin structure to accomplish the following objectives:

- Replace or repair the existing tide gate structure to improve the functionality of the flood barrier system.
- Reduce the possibility of flooding in lower reaches of Matadero, Adobe, and Barron Creeks.
- Prevent environmental impacts due to submergence of habitat areas within the Basin for Salt Marsh Harvest Mouse, California Clapper Rail bird and the Black Rail bird.
- Prevent impacts due to sea level rise or a 100-year fluvial flood.

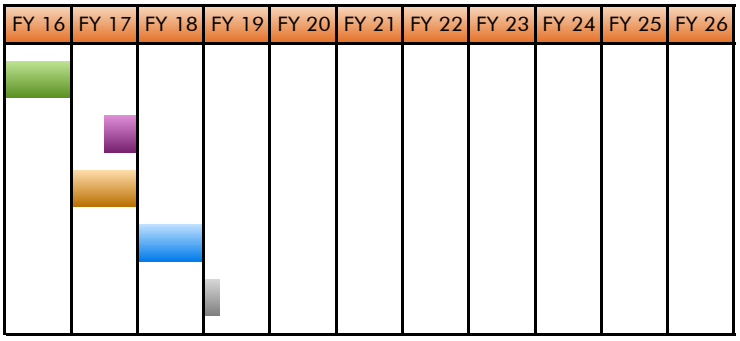
PROJECT LOCATION



SCHEDULE & STATUS

October 2014 to September 2018

Phase	Cost
Plan	333
Permits	150
Design	787
Construct	4,145
Closeout	5
	5,420



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	176	166	777	4,155	5	0	0	0	5,279
with inflation	176	166	777	4,422	6	0	0	0	5,546

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	816	384	858	0	4,341	6	0	0	0	5,546

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	5,546
Other Funding Sources	0
Total	5,546

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Permanente Creek, San Francisco Bay to Foothill Expressway**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	76
Project No.	10244001s
District Contact	Melanie Richardson mrichardson@valleywater.org

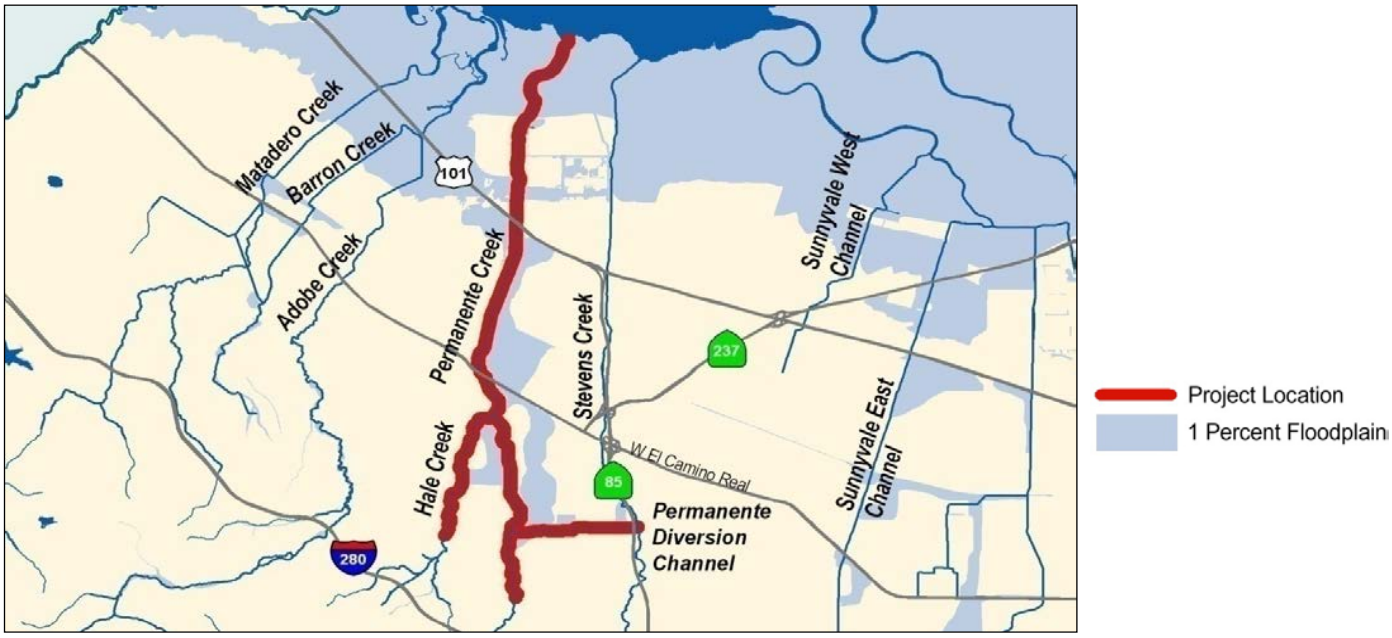
Permanente Creek, looking downstream at the golf course foot bridge

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, Hale Creek from Foothill Expressway to its confluence with Permanente Creek, and the diversion structure between Permanente and Stevens Creeks, to accomplish the following objectives:

- Provide flood protection to 1,664 parcels, including Middlefield Road and Central Expressway.
- Reduce erosion and sedimentation, reduce maintenance costs, and improve safety and stability of the failing channel on Permanente Creek from the San Francisco Bay to Foothill Expressway.
- Provide environmental restoration and enhancement benefits, where opportunities exist.
- Provide recreation enhancements, where opportunities exist.
- Provide natural flood protection by taking a multiple-objective approach.

PROJECT LOCATION

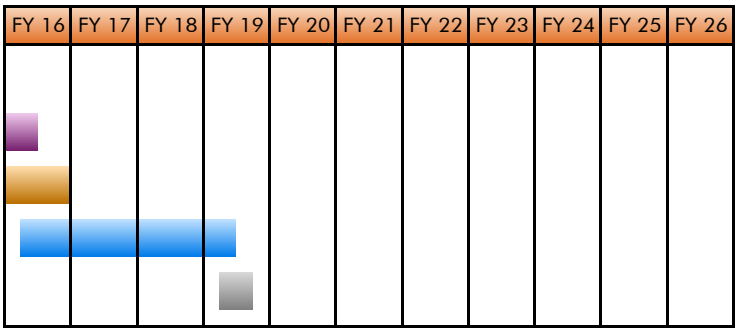


SCHEDULE & STATUS

July 2001 to December 2018

Construction includes multiple contract phases and three years of plant establishment monitoring.

Phase	Cost
Plan	10,048
Permits	3,261
Design	14,223
Construct	52,763
Closeout	100
	80,395



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,363	0	0	0	0	0	0	0	17,363
with inflation	17,363	0	0	0	0	0	0	0	17,363
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	10,380	34,359	12,011	6,180	100	0	0	0	63,030
with inflation	10,380	34,359	12,011	6,564	112	0	0	0	63,427
TOTAL	27,743	34,359	12,011	6,180	100	0	0	0	80,393
with inflation	27,743	34,359	12,011	6,564	112	0	0	0	80,790

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,541	0	178	0	0	0	0	0	0	17,541
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	45,028	0	289	11,722	6,564	112	0	0	0	63,427
TOTAL	62,569	0	467	11,722	6,564	112	0	0	0	80,968

Adjusted Budget includes adopted budget plus approved budget adjustments. Total Funding exceed total planned expenditures by approximately $178,000. Excess funds will be returned to the fund reserver at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,541
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	63,427
Total	80,968

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include sediment removal at three flood detention sites, and bypass channel inlet and outlet operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**San Francisquito Creek, San Francisco Bay through Searsville Dam**
Program	Flood Protection – Lower Peninsula Watershed
Priority No.	85
Project No.	10284007s
District Contact	Melanie Richardson mrichardson@valleywater.org

Upstream face of Pope/Chaucer Street with water surface approximately 2 feet below the soffit

PROJECT DESCRIPTION

This project provides coordination and support to the San Francisquito Joint Powers Authority, in partnership with the U.S. Army Corps of Engineers, to complete planning and design documents for an approved project alternative on San Francisquito Creek, from San Francisco Bay through Searsville Dam. This project will accomplish the following objectives:

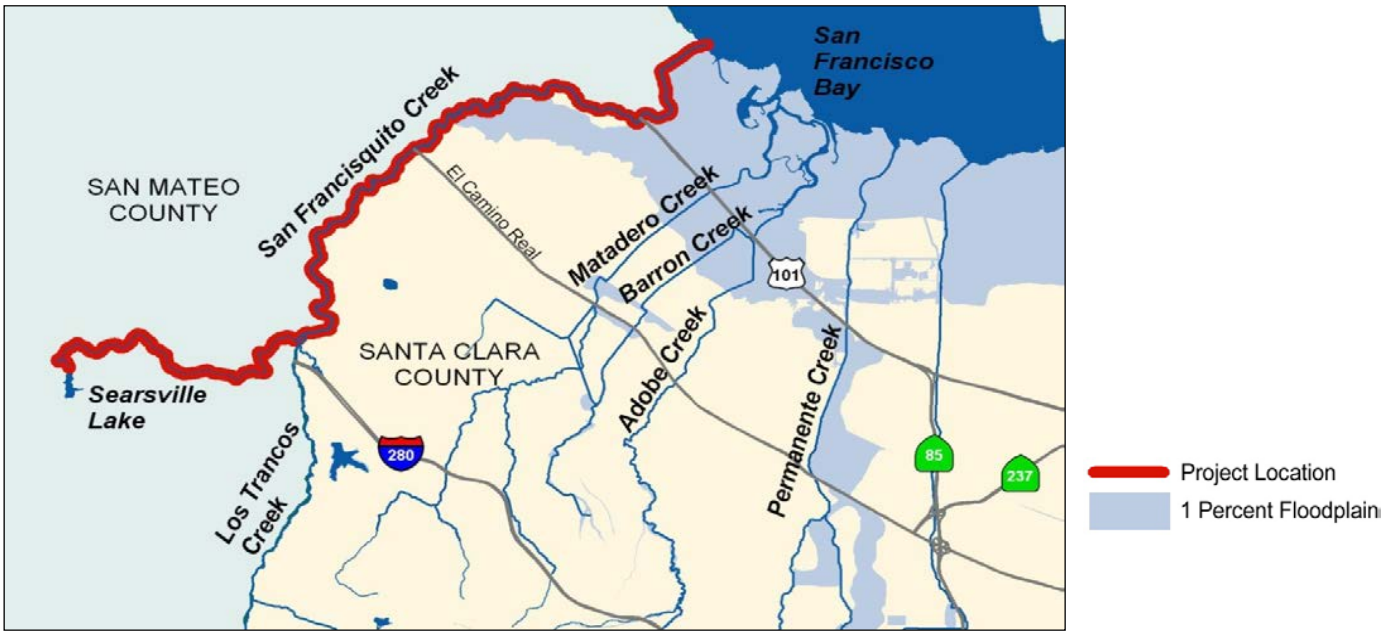
- Provide flood protection.
- Reduce bank erosion and sedimentation-related impacts along San Francisquito Creek.
- Avoid potential adverse impacts on fish and wildlife habitats.
- Minimize impacts to the creek's environmental resources and restore the riparian corridor where feasible.
- Develop public support for the preferred alternative.

The San Francisquito construction project will provide 100-year flood protection from San Francisco Bay to Highway 101 starting in FY16 and replace two bridges between Highway 101 and Middlefield Road with construction starting in FY16.

This project is accounted for in the following job numbers:

- 10284007 – SF Bay through Searsville Dam
- 10284008 – Early Implementation
- 26284001 – SF Bay through Searsville Dam
- 26284002 – Construction - San Francisco Bay to Middlefield Rd.

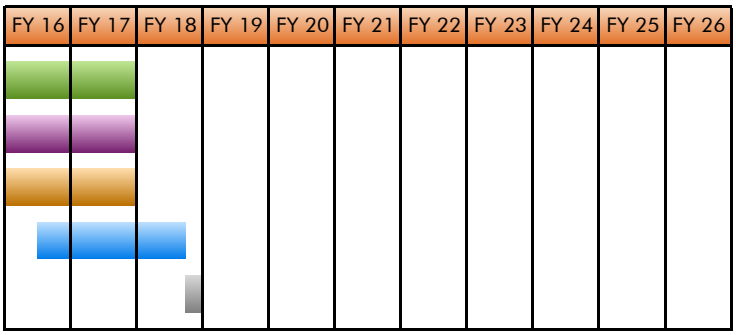
PROJECT LOCATION



SCHEDULE & STATUS

June 2003 to June 2018

Phase	Cost
Plan	4,314
Permits	815
Design	9,331
Construct	42,411
Closeout	100
	56,971



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	4,064
with inflation	4,064	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	1,614
with inflation	1,614	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	5,099	1,048	614	0	0	0	0	0	6,761
with inflation	5,099	1,048	614	0	0	0	0	0	6,761
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	3,976	29,006	536	12,926	0	0	0	0	46,444
with inflation	3,976	29,006	536	13,770	0	0	0	0	47,288
TOTAL	**14,753**	**30,054**	**1,150**	**12,926**	**0**	**0**	**0**	**0**	**58,883**
with inflation	**14,753**	**30,054**	**1,150**	**13,770**	**0**	**0**	**0**	**0**	**59,727**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	0	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,684	98	635	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	25,634	7,348	0	536	13,770	0	0	0	0	47,288
TOTAL	**37,996**	**7,446**	**635**	**536**	**13,770**	**0**	**0**	**0**	**0**	**59,748**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $21,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	46,070
San Francisquito Joint Powers Authority (DWR)	8,000
Total	**59,748**
U.S. Army Corps of Engineers - In-kind Services	3,000
County of San Mateo - In-kind Services	1,500

County and Corps participation are for Feasibility Study activities only. Additional funding will be negotiated during subsequent phases.

OPERATING COST IMPACTS

No operating budget impacts are expected from the construction of this project.

USEFUL LIFE: Not Available

Project	**San Tomas Creek, Quito Road Bridges Replacement**
Program	Flood Protection - West Valley Watershed
Priority No.	76
Project No.	20194005
District Contact	Liang Lee llee@valleywater.org

San Tomas Aquino Creek, looking upstream at one of the Quito Road bridge crossings and an adjacent pedestrian footbridge.

PROJECT DESCRIPTION

This project partners with the City of Saratoga, the Town of Los Gatos, and Caltrans to plan, design, and construct two bridge replacements on San Tomas Aquino Creek at Quito Road, to provide one-percent flood protection.

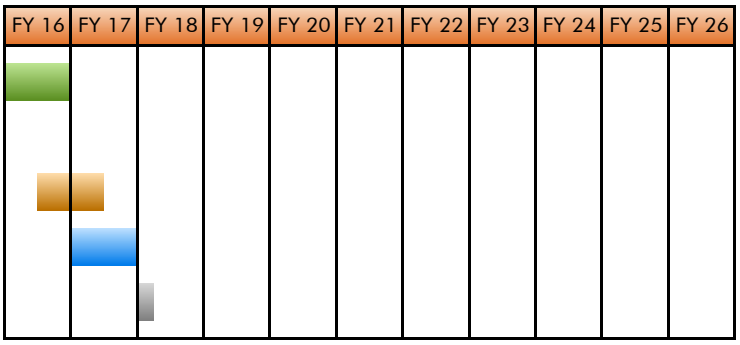
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2001 to September 2017

Phase	Cost
Plan	-
Permits	-
Design	-
Construct	658
Closeout	24
	682



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	292	271	0	119	0	0	0	0	682
with inflation	292	271	0	129	0	0	0	0	692

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
20194005-San Tomas Creek, Quito Road Bridges Replacement	292	271	0	0	129	0	0	0	0	692

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	692
Other Funding Sources	0
Total	**692**
City of Saratoga	300
Town of Los Gatos	300
Caltrans (Highway Bridge Replacement and Rehabilitation Program) - 80%	4,115

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease District operating costs as the facility is owned by the City of Saratoga.

USEFUL LIFE: 30+ Years

Project	**Sunnyvale East and West Channels Improvement**
Program	Flood Protection – West Valley Watershed
Priority No.	68
Project No.	26074002
District Contact	Ngoc Nguyen nnguyen@valleywater.org

Sunnyvale West Channel looking upstream from Java Drive

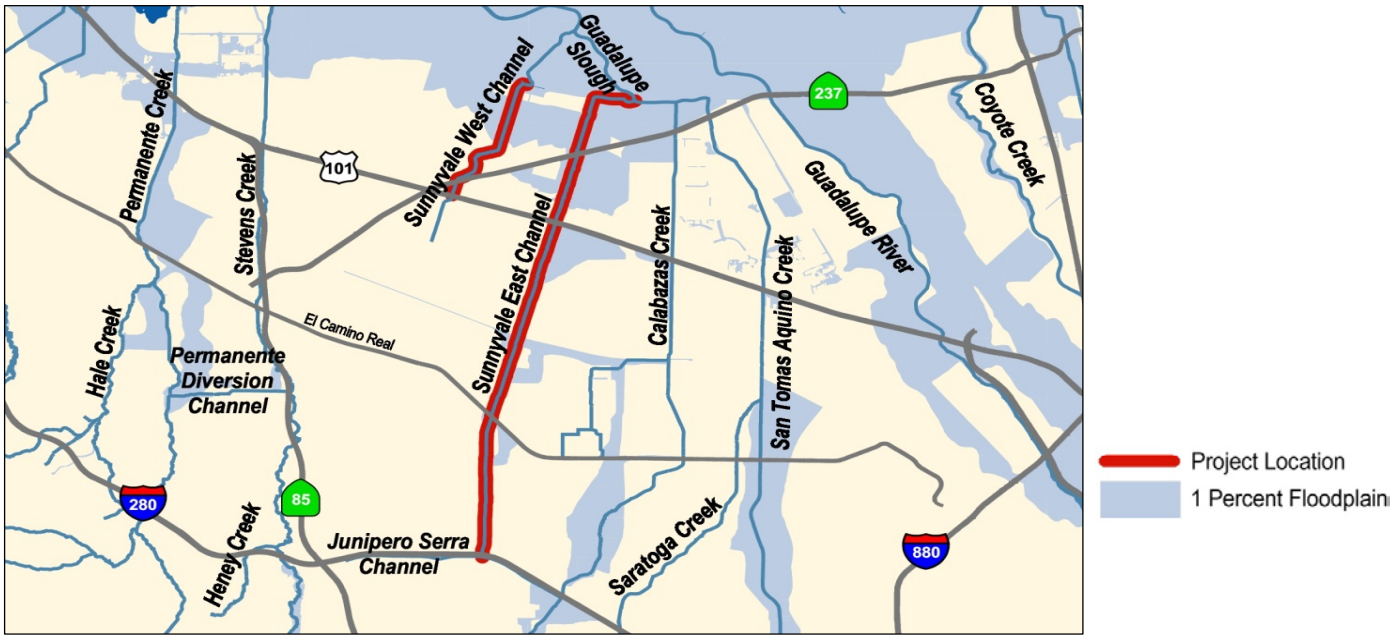
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to approximately 6.4 miles of the Sunnyvale East Channel, from Guadalupe Slough to Interstate 280, and 2.3 miles of the Sunnyvale West Channel, from Guadalupe Slough to Highway 101, to accomplish the following objectives:

- Provide flood protection to over 1,600 parcels along Sunnyvale East and West Channels.
- Provide environmental enhancement benefits where opportunities exist.
- Provide recreation enhancements where opportunities exist.
- Reduce erosion, sedimentation, and maintenance costs.
- Protect fish and wildlife habitat.

The Sunnyvale East and Sunnyvale West Channels were originally identified as separate projects. In order to improve efficiency by combining efforts, the planning, design and construction phases for both projects will be performed as a single effort.

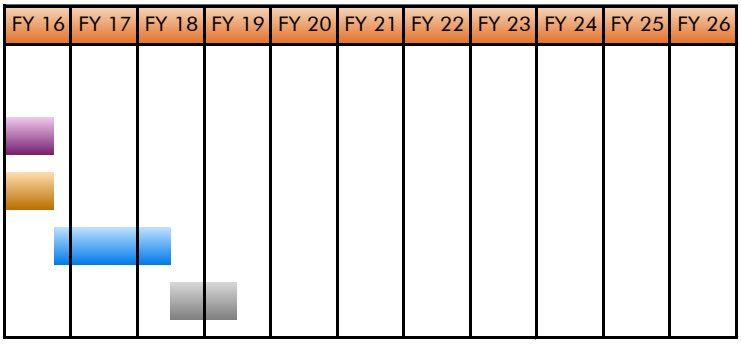
PROJECT LOCATION



SCHEDULE & STATUS

March 2006 to December 2018

Phase	Cost
Plan	5,765
Permits	858
Design	7,177
Construct	53,685
Closeout	50
	67,535



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26074002-Sunnyvale East and West Channels Improvement	13,517	700	22,268	31,000	50	0	0	0	67,535
with inflation	13,517	700	22,268	32,909	56	0	0	0	69,450

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26074002-Sunnyvale East and West Channels Improvement	37,878	8,299	31,960	0	23,217	56	0	0	0	69,450

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	69,450
Other Funding Source	0
Total	69,450

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $50,000 per year, beginning in FY 2020. Increases in operations and maintenance costs include graffiti removal, mowing and weed control under the levees, and for operation and maintenance of the Pond A4 detention basin.

USEFUL LIFE: 30+ Years

Project	**Canoas Creek Rodent Damage Repair**
Program	Flood Protection - Guadalupe Watershed
Priority No.	51
Project No.	30114002
District Contact	Melanie Richardson mrichardson@valleywater.org

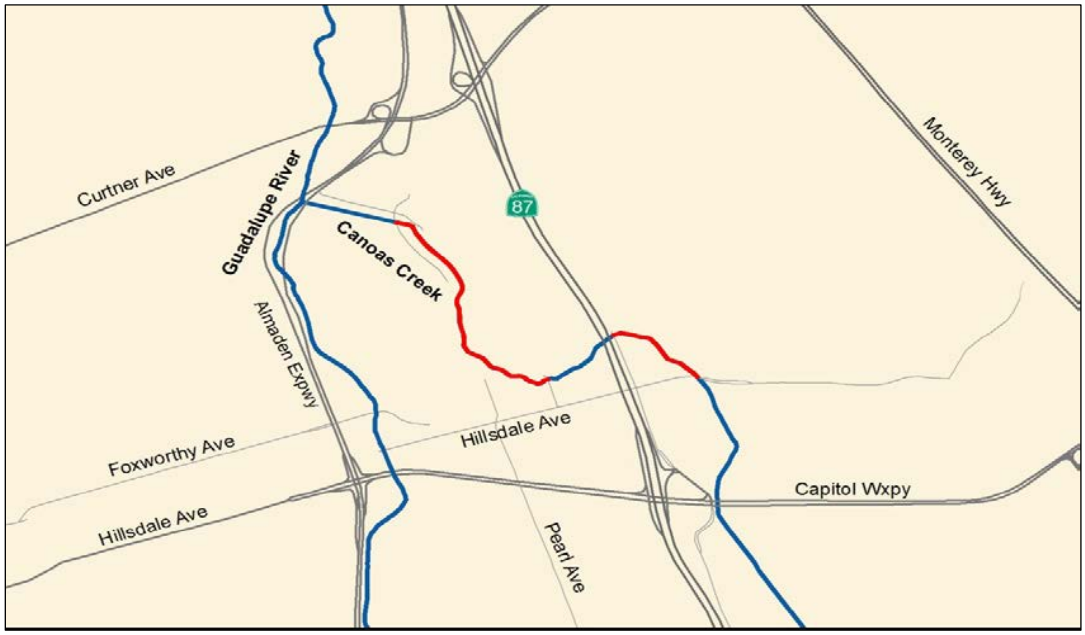
View of damage caused by burrowing animlas along Canoas Creek in the Guadalupe Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to Canoas Creek to accomplish the following objectives:

- Repair approximately 1 mile of damaged creek's levee and embankment.
- Reduce frequent maintenance costs associated with routine bank erosion repair projects.
- Reduce the risk of levee/bank slope failure due to damage caused from burrowing animals

PROJECT LOCATION

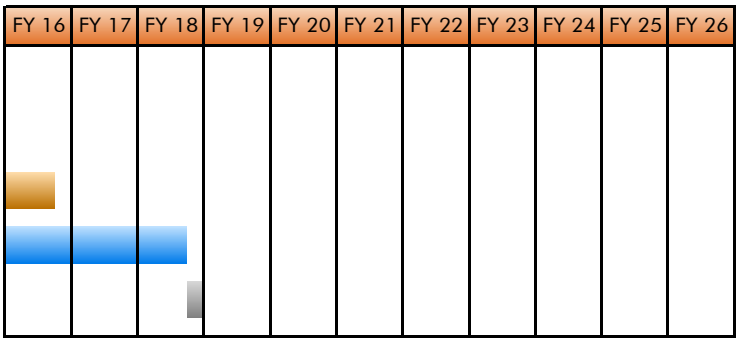


Project Location

SCHEDULE & STATUS

May 2015 to June 2018

Phase	Cost
Plan	27
Permits	-
Design	219
Construct	6,144
Closeout	25
	6,415



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
30114002-Canoas Creek Rodent Damage Repair	181	5,439	388	412	0	0	0	0	6,420
with inflation	181	5,439	388	446	0	0	0	0	6,454

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
30114002-Canoas Creek Rodent Damage Repair	300	5,320	0	388	446	0	0	0	0	6,454

Adjusted Budget includes adopted budget plus a planned budget adjustment for $1,291,000.

FUNDING SOURCES

(in thousands $)

Watershed Stream Stewardship	6,454
Other Funding Sources	0
Total	**6,454**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project	**Guadalupe River–Upper, Interstate 280 to Blossom Hill Road**
Program	Flood Protection – Guadalupe Watershed
Priority No.	82
Project No.	26154001s
District Contact	Melanie Richardson mrichardson@valleywater.org

Flooding from Guadalupe River on Willow Street near the Southern Pacific Railroad Bridge

PROJECT DESCRIPTION

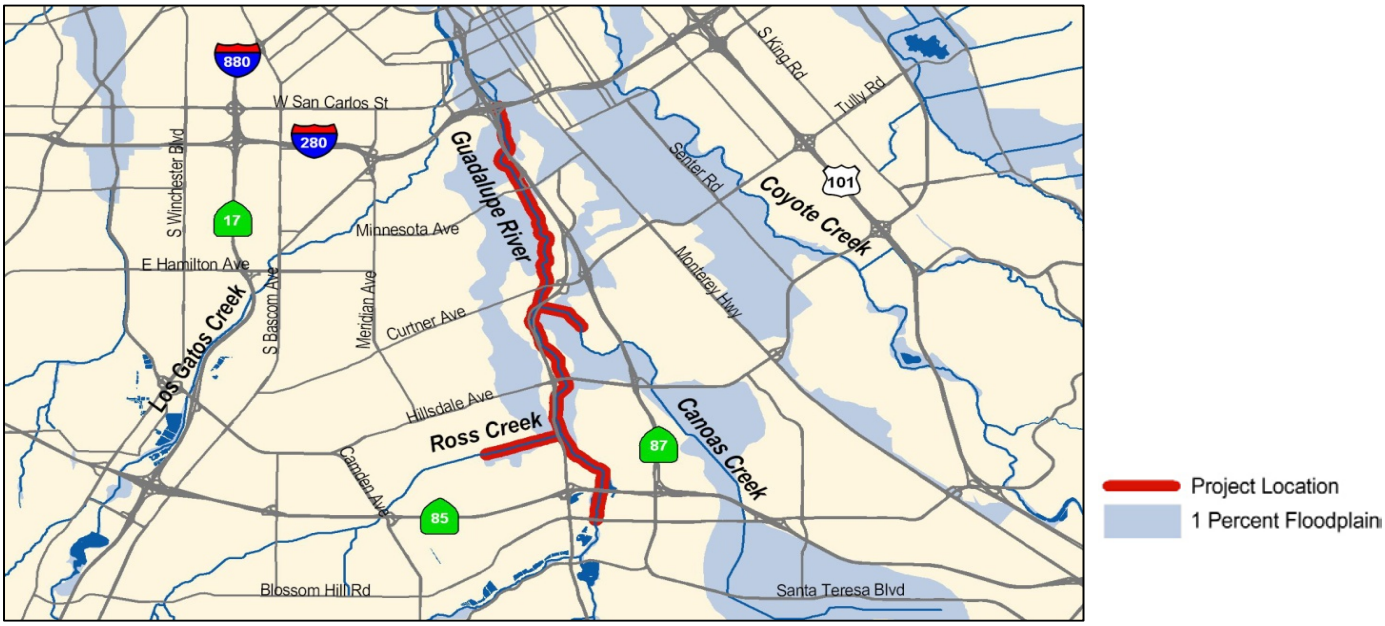
This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 6 miles of the Guadalupe River, from Interstate 280 to Blossom Hill Road, to accomplish the following objectives:

- Provide one-percent flood protection to nearly 7,000 parcels along the Guadalupe River, from I-280 to Blossom Hill Road, including portions of Ross Creek and Canoas Creek.
- Provide long-term net gains of 15 acres in riparian forest acreage, quality, and continuity of wildlife habitat, and conditions favoring Chinook salmon and steelhead trout.
- Provide access to an additional 19 miles of suitable upstream spawning and rearing habitat, which would result in significant long-term beneficial impacts on fisheries resources.
- Coordinate with the City of San Jose and the community to establish a continuous maintenance road suitable for trail development between Interstate 280 and Los Alamitos Creek.
- Improve water quality by reducing bank erosion and sedimentation-related impacts along the river and tributaries.
- Address and resolve permit coordination activities and watershed integration issues through the Guadalupe Watershed Integration Working Group.

This project is accounted for in the following job numbers:

- 26154001—Fish Passage Modification (Completed)
- 26154002—I-280 to Southern Pacific Railroad Bridge (Reach 6)
- 26154003—Southern Pacific Railroad Bridge to Blossom Hill Road (Reaches 7-12)

PROJECT LOCATION

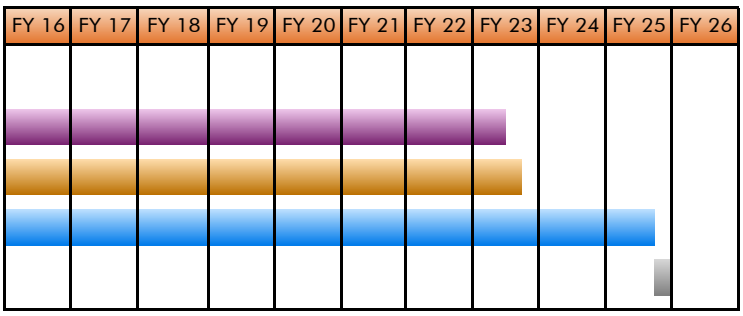


SCHEDULE & STATUS

July 2001 to June 2025

Planning phase is complete. Design and construction of eight individual reaches are being done sequentially.

Phase	Cost
Plan	8,970
Permits	2,410
Design	86,909
Construct	78,475
Closeout	197
	n/a



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	2,651
with inflation	2,651	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	32,390	1,320	909	0	0	1,250	1,270	30	37,169
with inflation	32,390	1,320	909	0	0	1,462	1,485	39	37,606
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	38,648	18,209	19,482	24,035	9,035	9,085	5,855	5,465	129,814
with inflation	38,648	18,209	19,482	25,613	10,115	10,562	7,037	6,725	136,392
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	7,887
with inflation	7,887	0	0	0	0	0	0	0	7,887
TOTAL	**81,576**	**19,529**	**20,391**	**24,035**	**9,035**	**10,335**	**7,125**	**5,495**	**177,521**
with inflation	**81,576**	**19,529**	**20,391**	**25,613**	**10,115**	**12,024**	**8,522**	**6,765**	**184,535**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY15**	**FY16**		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	34,201	302	793	116	0	0	1,462	1,485	39	37,606
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	67,840	0	10,983	8,499	25,613	10,115	10,562	7,037	6,725	136,392
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	**112,579**	**302**	**11,776**	**8,615**	**25,613**	**10,115**	**12,024**	**8,522**	**6,765**	**184,535**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	124,052
SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood Protection Fund	23,098
State of California	21,600
City of San Jose	3,785
Total	**184,535**
U.S. Army Corps of Engineers - In-kind Services	188,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $480,000 per year, beginning in FY 2025, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and operations and maintenance in accordance with the Corps Operations and Maintenance Manual.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Calaveras Boulevard to Interstate 680**
Program	Flood Protection – Coyote Watershed
Priority No.	75
Project No.	26174041s
District Contact	Melanie Richardson mrichardson@valleywater.org

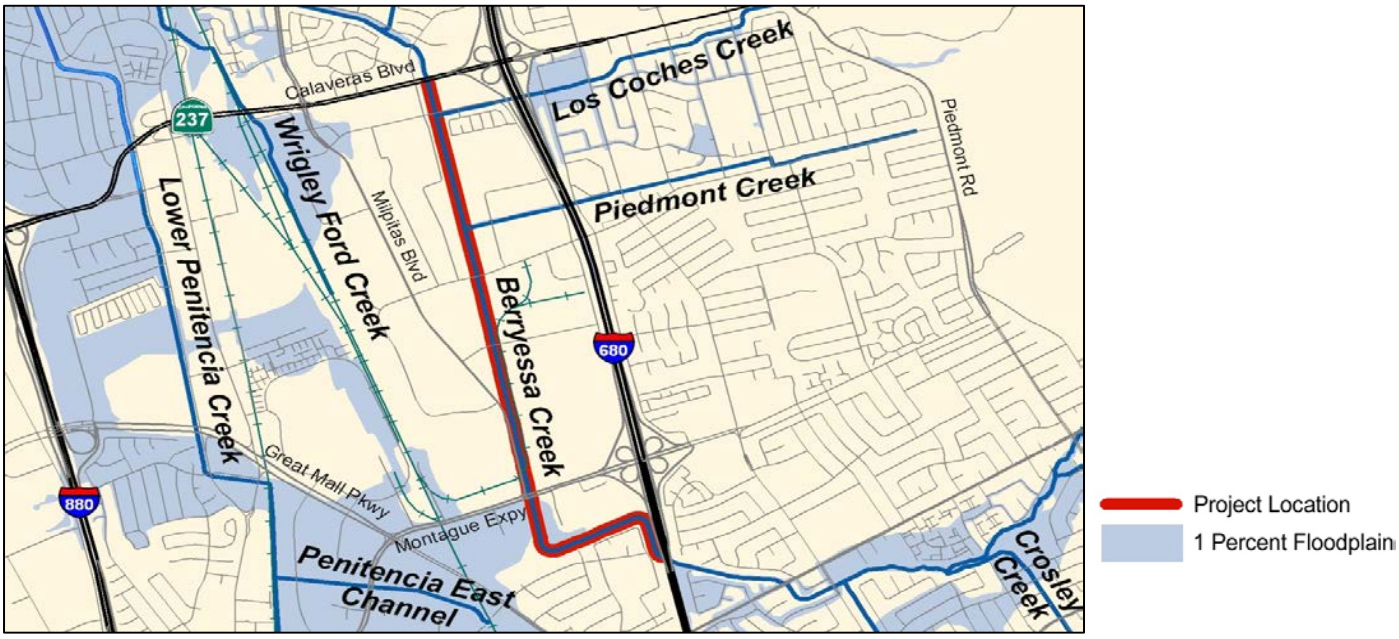
Berryessa Creek near flood stage at Piedmont Road in San Jose

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 2 miles of Berryessa Creek, from Calaveras Boulevard to Interstate 680, to accomplish the following objectives:

- Provide one-percent flood protection to more than 1,100 homes, businesses, and public buildings.
- Reduce sedimentation and maintenance requirements.
- Mitigate for project impacts.
- Improve stream habitat values.
- Coordinate with the cities of San Jose and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection Program Objectives.

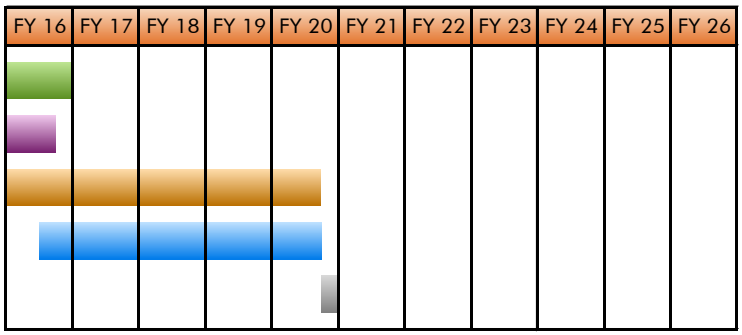
PROJECT LOCATION



SCHEDULE & STATUS

January 2000 to June 2020

Phase	Cost
Plan	7,879
Design	550
Design	11,908
Construct	27,467
Closeout	203
	48,007



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
26174041-Berryessa Creek, Corps Coordination	9,156	2,868	14,747	1,396	850	724	0	0	29,741
with inflation	9,156	2,868	14,747	1,500	940	825	0	0	30,035
26174042-Berryessa Creek, LERRDs	14,657	6,161	0	0	0	0	0	0	20,818
with inflation	14,657	6,161	0	0	0	0	0	0	20,818
TOTAL	**23,813**	**9,029**	**14,747**	**1,396**	**850**	**724**	**0**	**0**	**50,559**
with inflation	**23,813**	**9,029**	**14,747**	**1,500**	**940**	**825**	**0**	**0**	**50,853**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY15**	**FY16**		**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**Future**	
26174041-Berryessa Creek, Corps Coordination	9,375	2,649	0	14,747	1,500	940	825	0	0	30,035
26174042-Berryessa Creek, LERRDs	19,464	1,354	0	0	0	0	0	0	0	20,818
TOTAL	**28,839**	**4,003**	**0**	**14,747**	**1,500**	**940**	**825**	**0**	**0**	**50,853**

Adjusted Budget includes adopted budget plus a planned budget adjustment of $164,000.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,800
State of California	23,053
Department of Water Resources (Prop 1E)	10,000
Total	**50,853**
U.S. Army Corps of Engineers - In-kind Services	13,600

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $80,000 per year, beginning in FY 2021, to maintain approximately 2 miles of new levees and flood walls, and for activities such as vegetation spraying and graffiti removal.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard**
Program	Flood Protection – Coyote Watershed
Priority No.	67
Project No.	40174004s
District Contact	Melanie Richardson mrichardson@valleywater.org

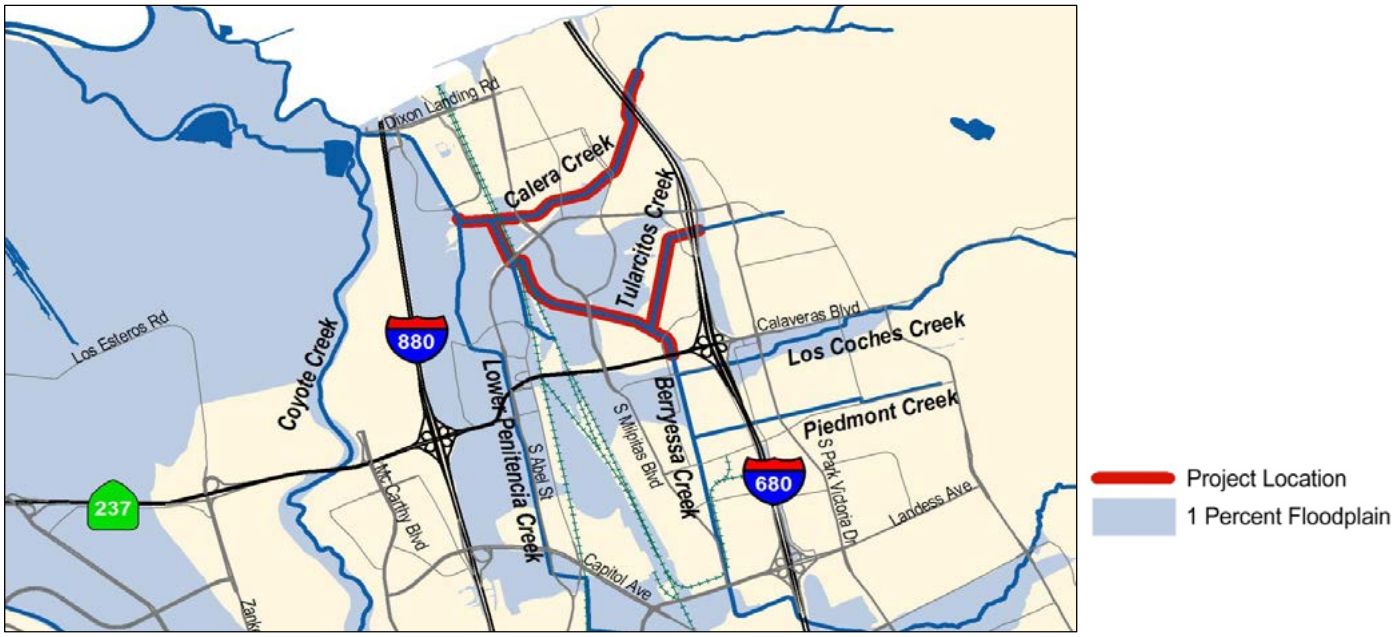
Berryessa Creek upstream of the confluence with Lower Penitencia Creek

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 3 miles of Berryessa Creek and its tributaries, from the confluence with Lower Penitencia Creek to Calaveras Boulevard (Phase 1 and 2) and the lower reaches of both Calera and Tularcitos Creeks (Phase 3), to accomplish the following objectives:

- Provide one-percent flood protection to 1,100 homes, businesses, and public buildings in the surrounding area.
- Improve the structural integrity of the levees.
- Improve maintenance access and safety for District staff.
- Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.

PROJECT LOCATION

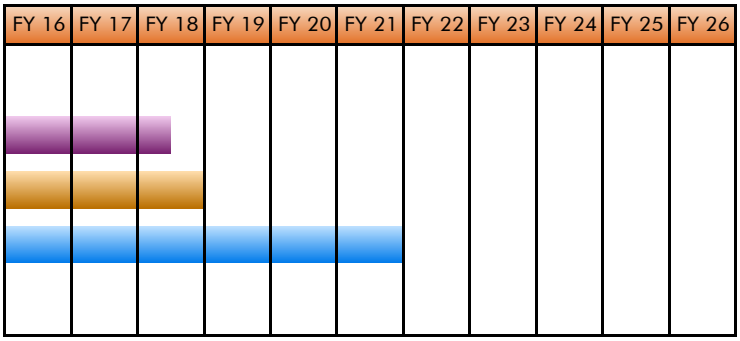


SCHEDULE & STATUS

March 2001 to June 2021

Planning phase is complete. Construction includes three phases and three years of plant establishment monitoring.

Phase	Cost
Plan	6,899
Permits	1,282
Design	9,526
Construct	81,678
Closeout	89
	99,474



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	47,021	2,200	6,274	142	132	172	0	0	55,941
with inflation	47,021	2,200	6,274	154	148	201	0	0	55,998
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	0	11,026	47,376	1,030	92	92	132	0	59,748
with inflation	0	11,026	47,376	1,114	103	108	161	0	59,888
TOTAL	**47,021**	**13,226**	**53,650**	**1,172**	**224**	**264**	**132**	**0**	**115,689**
with inflation	**47,021**	**13,226**	**53,650**	**1,268**	**252**	**309**	**161**	**0**	**115,886**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	55,191	304	6,274	0	154	148	201	0	0	55,998
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	0	31,226	20,200	27,176	1,114	103	108	161	0	59,888
TOTAL	**55,191**	**31,530**	**26,474**	**27,176**	**1,268**	**252**	**309**	**161**	**0**	**115,886**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	100,886
Department of Water Resources (Prop 1E)	15,000
Total	**115,886**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase annual operating costs by approximately $100,000 per year. Operating costs will increase with completion of construction of each of 3 phases: beginning with a $50,000 increase in FY 2017 (with completion of Phase 1), increasing to $65,000 in FY 2018 (with completion of Phase 2), and finally increasing to $100,000 with the completion of Phase 3. These costs will be for increased maintenance activities such as sediment removal, vegetation management, levee maintenance, graffiti abatement, and trash & debris cleanup.

USEFUL LIFE: 30+ Years

Project	**Coyote Creek, Montague Expressway to Interstate 280**
Program	Flood Protection – Coyote Watershed
Priority No.	72
Project No.	26174043
District Contact	Liang Lee LLee@valleywater.org

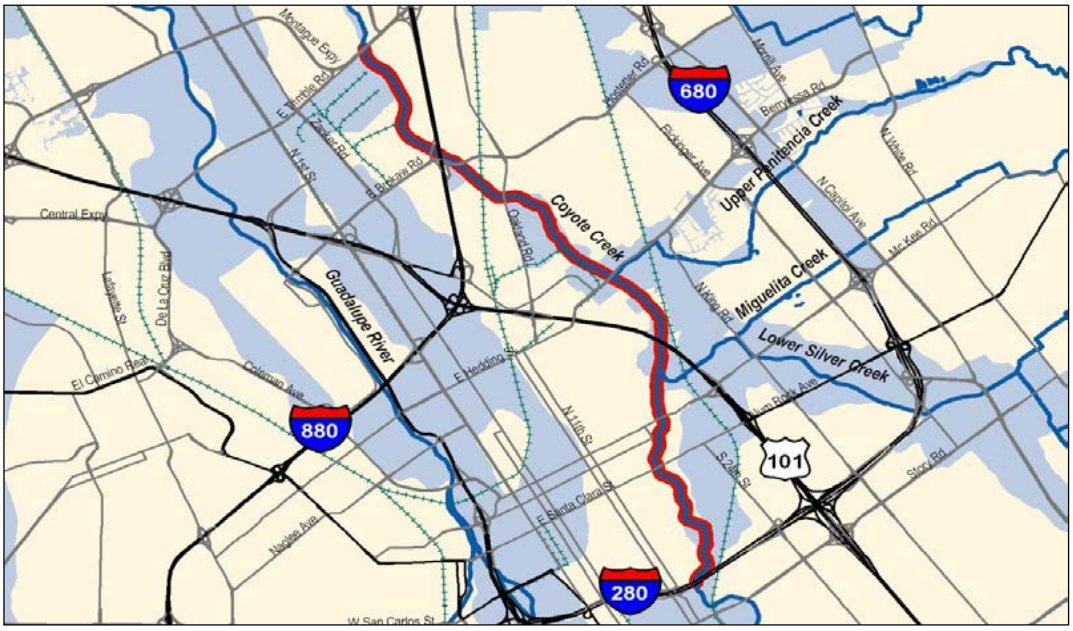
Flooding from Coyote Creek on 17th Street near downtown San Jose in January 1997

PROJECT DESCRIPTION

This project plans, designs, and partially constructs improvements along approximately 6.1 miles of Coyote Creek, from Montague Expressway to Interstate 280, to accomplish the following objectives:

- Complete planning and design for flood protection of 1,400 businesses and homes from a one percent flood for Coyote Creek from Montague Expwy to I-280.
- Improve water quality, enhance stream habitat, and provide recreational opportunities.
- Incorporate revegetation and aesthetic elements of the Coyote Creek park chain.
- Minimize long term maintenance needs.

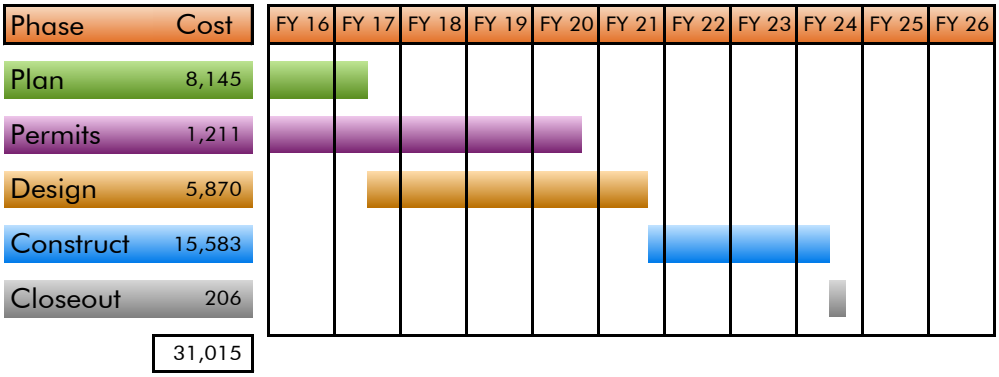
PROJECT LOCATION



SCHEDULE & STATUS

September 2002 to March 2024

Project is on hold and will resume in 2018.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	10,775	2,068	1,235	1,366	13,455	865	675	590	31,029
with inflation	10,775	2,068	1,235	1,477	14,749	1,012	821	747	32,885

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26174043-Coyote Creek, Montague Expressway to Interstate 280	30,486	0	17,643	0	0	0	831	821	747	32,885

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	32,885
Other Funding Source	0
Total	32,885

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY 2025. Currently the District has limited and sporadic property rights within the project limits along the creek, and ongoing maintenance costs are relatively small. Project implementation may include acquisition of continuous right of way for construction and future operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**Cunningham Flood Detention Certification**
Program	Flood Protection – Coyote Watershed
Priority No.	78
Project No.	40264011
District Contact	Melanie Richardson mrichardson@valleywater.org

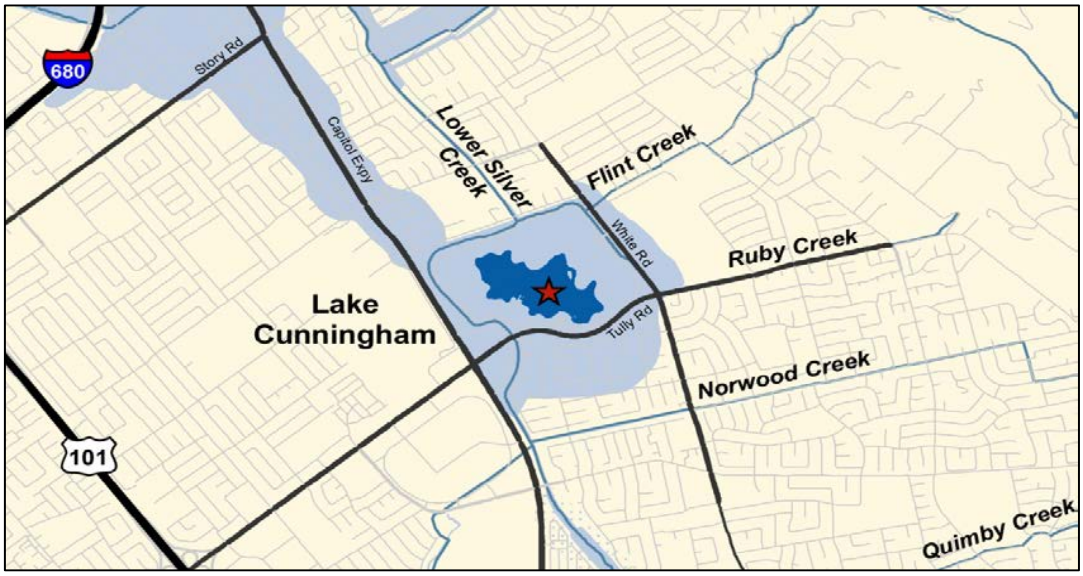
Flooding from Lower Silver Creek in February 1969 at the future site of Lake Cunningham Regional Park

PROJECT DESCRIPTION

This project plans, designs, and constructs final improvements at Lake Cunningham Regional Park (Park) to ensure the site operates as a flood detention facility in accordance with the 1978 agreement with the City of San Jose (City) and to ensure the Lower Silver Creek Project (LSC Project) improvements downstream of Cunningham Avenue function as designed. This project will accomplish the following objectives:

- Validate that the flood detention facility can attenuate the volume of water associated with 2,249 cfs below the park land elevation as stipulated in the 1978 Joint Use Agreement between the City and the District.
- Obtain Federal Emergency Management Agency (FEMA) certification of theflood detention facility and Lower Silver Creek improvements north of the Park to revise the applicable flood insurance rate maps in the Lower Silver Creek 1-percent floodplain near the north of the Park.
- Update the 1978 Joint Use Agreement between the City and the District to meet the flood detention facility's validated condition.

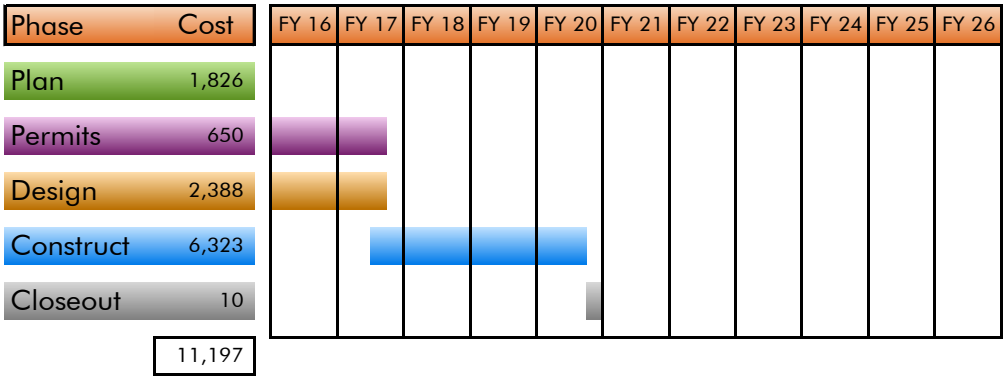
PROJECT LOCATION



Project Location
1 Percent Floodplain

SCHEDULE & STATUS

August 1999 to June 2020



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40264011-Cunningham Flood Detention Certification	1,540	1,735	5,012	2,200	600	110	0	0	11,197
with inflation	1,540	1,735	5,012	2,216	675	129	0	0	11,307

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40264011-Cunningham Flood Detention Certification	4,458	0	1,183	3,829	2,216	675	129	0	0	11,307

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	11,307
Other Funding Source	0
Total	**11,307**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operations costs. The project is within District jurisdiction and it is designed to minimize maintenance activities such as sediment removal, so as to have minimal or no additional impact to the operating budget.

USEFUL LIFE: 30+ Years

Project	**Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks**
Program	Flood Protection – Coyote Watershed
Priority No.	78
Project No.	40334005
District Contact	Melanie Richardson mrichardson@valleywater.org

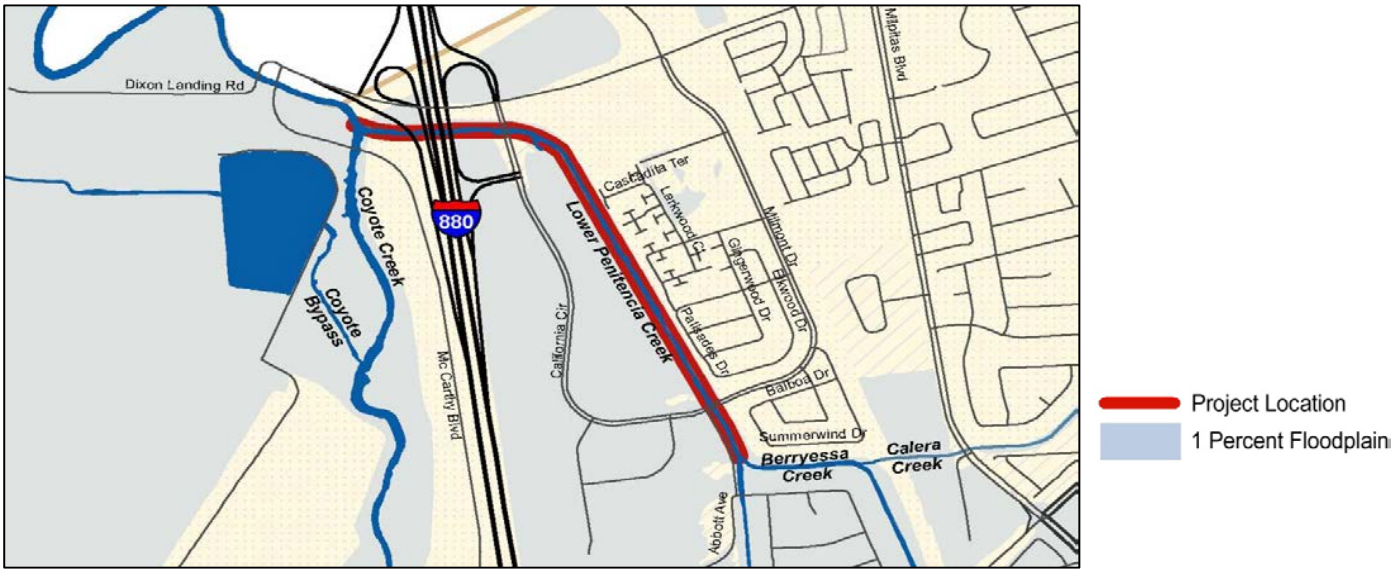
Lower Penitencia Creek, looking downstream from Milmont Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately 1 mile of Lower Penitencia Creek from the downstream confluence with Coyote Creek to the upstream confluence with Lower Berryessa Creek, to accomplish the following objectives:

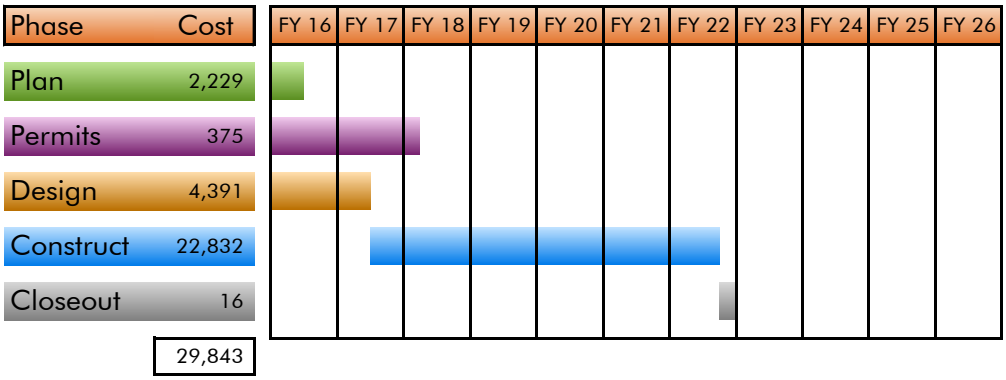
- Provide one-percent flood protection along the creek.
- Identify opportunities for environmental enhancement, such as stream restoration, trails, parks, and open space for District Board consideration.
- Minimize impacts to environmental resources and provide opportunities to protect and enhance existing riparian habitat.

PROJECT LOCATION



SCHEDULE & STATUS

October 2010 to June 2022



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	2,713	4,087	2,891	13,661	6,235	300	300	316	30,503
with inflation	2,713	4,087	2,891	14,503	6,829	351	365	400	32,139

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	4,807	1,993	0	2,891	14,503	6,829	351	365	400	32,139

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	27,139
Department of Water Resources (Prop 1E)	5,000
Total	32,139

OPERATING COST IMPACTS

Operating cost impacts will be established during the design phase.

USEFUL LIFE: 50 Years

Project	**Lower Silver Creek, I-680 to Cunningham Avenue (R4-6)**
Program	Flood Protection – Coyote Watershed
Priority No.	95
Project No.	40264007s
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Lower Silver Creek looking upstream from Capital Expressway

PROJECT DESCRIPTION

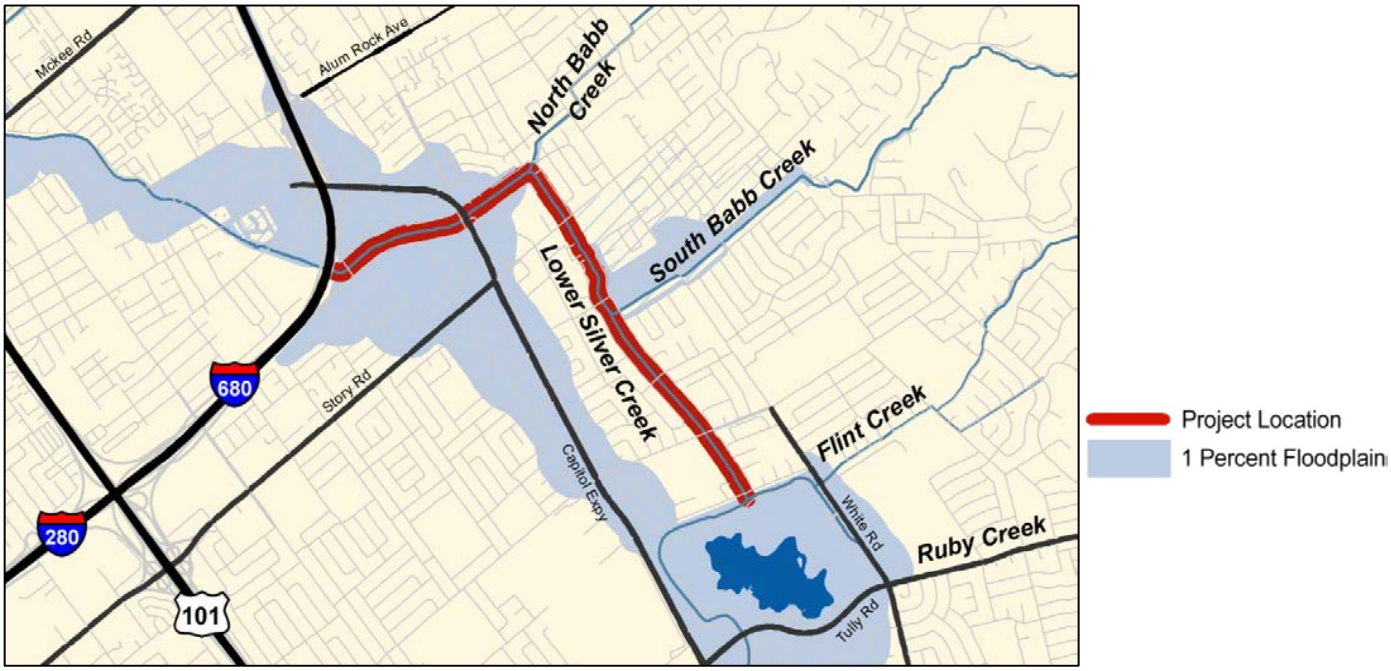
This project is part of a flood control project that partners with the Natural Resource Conservation Service (NRCS) to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement from the state and federal governments to accomplish the following objectives:

- Increase flood protection to 3,800 parcels in the surrounding area.
- Allow for on-site mitigation of project impacts, and in some cases enhancement of existing habitat values by increased wetlands and riparian habitat.
- Improve vehicle and pedestrian bridges crossing Lower Silver Creek.
- Develop the footprint for a future trail project between Capitol Avenue-Frontage Road and Jackson Avenue that ensures pedestrians and bicyclists may travel beneath the Dobern Pedestrian Bridge.

This project is accounted for in the following job numbers:

- 40264007–Lower Silver Creek, I-680 to N. Babb Rd. (Reach 4 Planning) - Completed
- 40264008–Lower Silver Creek, I-680 to Cunningham Rd. (Reaches 4-6)
- 40264012–Lower Silver Creek (Reaches 4-6) Reimbursable

PROJECT LOCATION

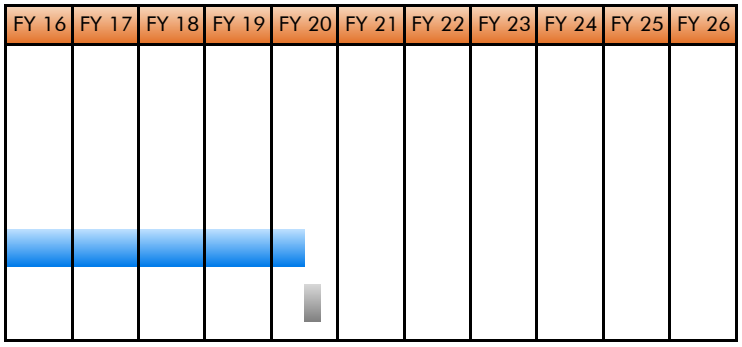


SCHEDULE & STATUS

August 1991 to March 2020

Planning and Design phases are complete

Phase	Cost
Plan	6,309
Permits	147
Design	10,766
Construct	74,787
Closeout	126
	92,135



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	2,371
with inflation	2,371	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	86,838	2,293	3,084	255	50	10	0	0	92,530
with inflation	86,838	2,293	3,084	276	56	11	0	0	92,558
40264012-Lower Silver Creek, LERRDs (R4-6)	1,786	60	749	50	50	40	0	0	2,735
with inflation	1,786	60	749	54	56	47	0	0	2,752
TOTAL	90,995	2,353	3,833	305	100	50	0	0	97,636
with inflation	90,995	2,353	3,833	330	112	58	0	0	97,681

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	90,021	1,484	2,374	710	276	56	11	0	0	92,558
40264012-Lower Silver Creek, LERRDs (R4-6)	2,912	0	1,066	0	0	0	0	0	0	2,912
TOTAL	95,304	1,484	3,440	710	276	56	11	0	0	97,841

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved budget exceeds planned expenditures by approximately $160,000. Excess funds will be returned to fund reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	44,778
State of California	8,387
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	97,841

OPERATING COST IMPACTS

Operating budget impacts from construction of this project are expected to be insignificant. Repair of several erosion sites will reduce maintenance needs, but will not affect overall sediment removal or vegetation control practices.

USEFUL LIFE: 50+ Years

Project	**Upper Penitencia Creek, Coyote Creek to Dorel Drive**
Program	Flood Protection – Coyote Watershed
Priority No.	77
Project No.	40324003s
District Contact	Liang Lee LLee@valleywater.org

Flooding at King Road on Upper Penitencia Creek

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the following objectives.

- Provide one-percent flood protection to more than 5,000 homes, businesses, and public buildings.
- Mitigate for project impacts.
- Improve stream habitat values and fisheries potential.
- Reduce sedimentation and maintenance requirements.
- Identify opportunities to integrate recreation improvements consistent with the City of San Jose's Master Plans for Penitencia Creek Park Chain Reach 1 and Reach 2, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan.
- Obtain a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA).
- Incorporate the District's Clean, Safe Creeks and Natural Flood Protection (NFP) Program Objectives.
- Coordinate with local agencies to ensure that planned flood control improvements do not conflict with trail construction by the City of San Jose that is scheduled to begin in the latter part of 2013.

This project is accounted for in the following job numbers:

- 40324003—District coordination with Corps for Corps' work
- 40324005—District's Lands, Easements, Rights of Way, Relocation, and Disposal (LERRDs)
- 26324001—Safe Clean Water Program coordination with Corps for Corps' work

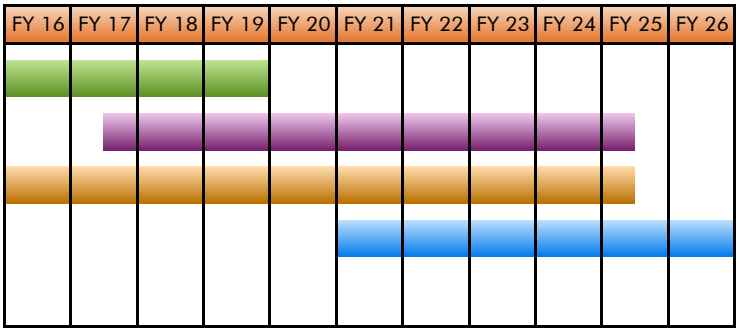
PROJECT LOCATION

Project Location
1 Percent Floodplain

SCHEDULE & STATUS

March 1996 to June 2027

Phase	Cost
Plan	10,037
Permits	1,690
Design	21,620
Construct	26,554
Closeout	20
	59,921



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,647	310	0	0	0	0	0	0	8,957
with inflation	8,647	310	0	0	0	0	0	0	8,957
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	3,472	2,912	1,361	645	0	0	0	0	8,390
with inflation	3,472	2,912	1,361	698	0	0	0	0	8,443
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	0	385	0	4,644	5,453	5,453	11,736	16,578	44,249
with inflation	0	385	0	5,023	6,134	6,379	16,175	17,141	51,237
TOTAL	**12,119**	**3,607**	**1,361**	**5,289**	**5,453**	**5,453**	**11,736**	**16,578**	**61,596**
with inflation	**12,119**	**3,607**	**1,361**	**5,721**	**6,134**	**6,379**	**16,175**	**17,141**	**68,637**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,970	0	13	0	0	0	0	0	0	8,970
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	8,544	0	2,160	0	0	0	0	0	0	8,544
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	0	385	0	0	5,023	6,134	6,379	16,175	17,141	51,237
TOTAL	**17,514**	**385**	**2,173**	**0**	**5,023**	**6,134**	**6,379**	**16,175**	**17,141**	**68,751**

Adjusted Budget includes adopted budget plus approved budget adjustments. Approved Funding exceeds planned expenditures by approximately $114,000. Excess funding will be returned to reserves at the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,514
SCVWD Safe, Clean Water Fund	51,237
Total	**68,751**
U.S. Army Corps of Engineers - In-kind Services	102,720

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not Available

Project	**Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	78
Project No.	50284010
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Lower Llagas Creek near Pajaro River

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on approximately 7.15 miles of Lower Llagas Creek, from Buena Vista Avenue to Pajaro River, to accomplish the following objectives:

- Evaluate the current flood risk in the area surrounding the project versus the design level flood risk.
- Develop options to provide flood protection for Lower Llagas Creek Reaches 2 and 3 in accordance with Federal Emergency Management Agency (FEMA) criteria where applicable.
- Identify feasible opportunities for environmental restoration and corridor preservation.

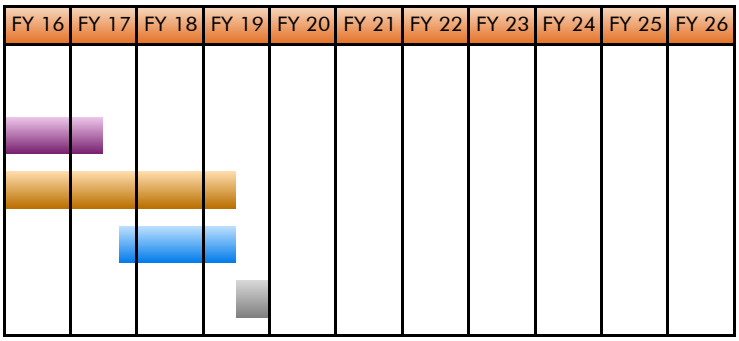
PROJECT LOCATION

SCHEDULE & STATUS

July 2008 to June 2019

Project is "On Hold" until the Post-Project Hydraulic Analysis for the Upper Llagas Creek project is completed to address the City of Gilroy's request.

Phase	Cost
Plan	2,898
Permits	1,202
Design	2,505
Construct	4,600
Closeout	50
	11,255



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,297	0	1,258	4,500	2,200	0	0	0	11,255
with inflation	3,297	0	1,258	4,826	2,410	0	0	0	11,791

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	7,046	0	3,749	0	2,335	2,410	0	0	0	11,791

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	11,791
Other Funding Source	0
Total	11,791

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 30+ Years

Project	**Llagas Creek–Upper, Buena Vista Avenue to Llagas Road**
Program	Flood Protection – Uvas/Llagas Watershed
Priority No.	75
Project No.	26174051s
District Contact	Ngoc Nguyen NNguyen@valleywater.org

Llagas Creek floods at Watsonville Road and the surrounding area

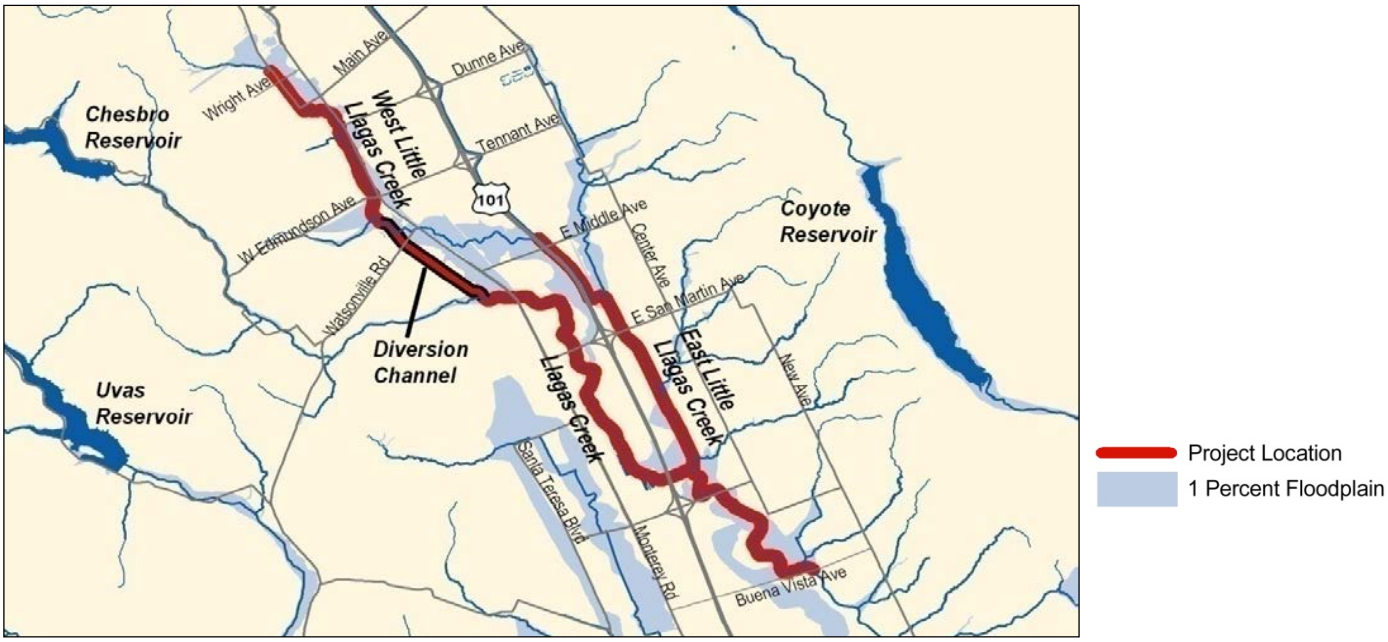
PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (Corps) to plan, design, and construct improvements on approximately 13.6 miles of Upper Llagas Creek, from Buena Vista Avenue to Llagas Road, to provide an increased level of flood protection with adequate freeboard. SCVWD shall coordinate with the County of Santa Clara and the City of Morgan Hill on public access and recreational trail opportunities within Reaches 7 and 8 of this project.

This project is accounted for in the following job numbers:

- 26174051 - Reaches 4-8 & 14 - Reimbursable - Lands, Easements, Rights of Way, Relocation, & Disposal (LERRDs)
- 26174052 - Reaches 4-8 & 14 - Coordination with the Corps
- 26174053 - Technical Studies (completed)
- 26174054 - Design
- 50C40335 - Construction, Reach 5, 6, & 7b

PROJECT LOCATION

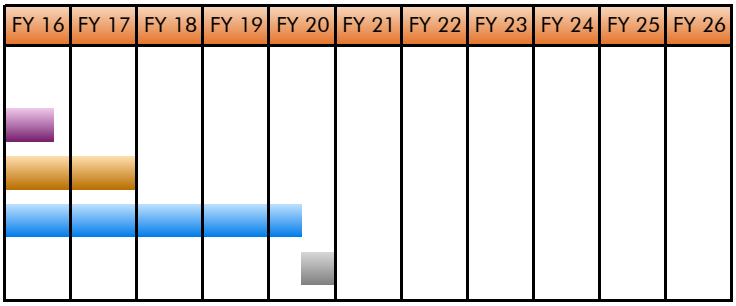


SCHEDULE & STATUS

August 2000 to June 2020

Project schedule may vary considerably and is dependent upon the Corps and Congress.

Phase	Cost
Plan	3,720
Permits	3,279
Design	59,466
Construct	103,773
Closeout	-
	170,238



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26174051-Llagas Ck—Upper, LERRDs	14,965	2,966	24,700	0	0	0	0	0	42,631
with inflation	14,965	2,966	24,700	0	0	0	0	0	42,631
26174052-Llagas Ck—Upper, Corps Coordination	2,118	0	30,219	42,400	8,000	125	0	0	82,862
with inflation	2,118	0	30,219	42,416	8,000	125	0	0	82,878
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
with inflation	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	18,993	1,550	1,071	0	0	0	0	0	21,614
with inflation	18,993	1,550	1,071	0	0	0	0	0	21,614
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	0	17,000	6,000	0	0	23,000
with inflation	0	0	0	0	17,000	6,000	0	0	23,000
TOTAL	37,522	4,516	55,990	42,400	25,000	6,125	0	0	171,553
with inflation	37,522	4,516	55,990	42,416	25,000	6,125	0	0	171,569

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26174051-Llagas Ck—Upper, LERRDs	41,670	962	24,701	0	0	0	0	0	0	42,632
26174052-Llagas Ck—Upper, Corps Coordination	18,509	50,384	66,775	0	5,860	8,000	125	0	0	82,878
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	18,855	1,688	0	1,071	0	0	0	0	0	21,614
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	0	0	0	0	17,000	6,000	0	0	23,000
TOTAL	80,480	53,034	91,476	1,071	5,860	25,000	6,125	0	0	171,570

Adjusted Budget includes adopted budget plus a planned budget adjustment of $962,000.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe Clean Water Program Fund	89,987
Watershed Stream Stewardship Fund	23,000
State of California	37,342
City of Morgan Hill	3,341
Total	171,570
U.S. Army Corps of Engineers - In-kind Services	65,000

OPERATING COST IMPACTS

Operating cost impacts will be provided after completion of the design phase.

USEFUL LIFE: 30+ Years

Project	**Erosion Repair Program**
Program	Flood Protection - Multiple Watersheds
Priority No.	67
Project No.	40214021s
District Contact	Melanie Richardson MRichardson@valleywater.org

View of damage caused by burrowing animlas along West Branch of Llagas Creek in the Uvas/Llagas Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to levee and stream bank sites that have erosion damage. Each site requires a different type of repair based on location, severity, and velocities in the creek. The objective of this project is to restore the stream bank or levee to a stable condition so as to reduce the risk of flooding and/or damage to adjacent properties and facilities. For facilities with animal conflict damage, the objective is to repair the damage caused by animas and where applicable, install deterrents for future animal activities. The repair work consists of, but is not limited to:

- Excavation and rebuilding of eroded soil material.
- Installation of rodent barriers such as mesh or fabric.
- Repairing the banks with methods commensurate with the extents of damage and environmental constraints.

This project is accounted for in the following job numbers:

- 40214021 – ERP-Coyote Creek, Upstream Hwy 237
- 40214022 – ERP-Coyote Creek, Downstream Hwy 237
- 50184003 – ERP-Uvas Creek, Wren-Levee End
- 50314001 – ERP-West Branch Llagas Creek
- 62C40392 - ERP-Future Work

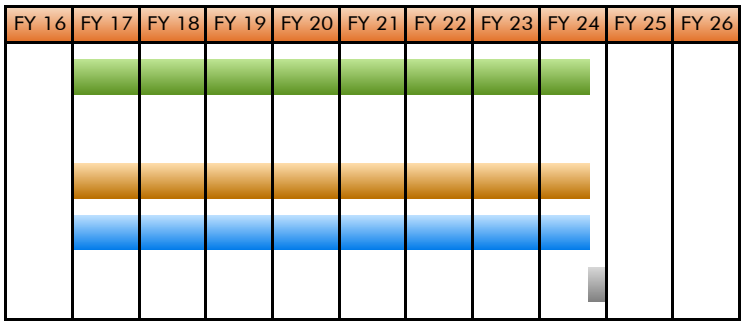
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2016 to June 2024

Phase	Cost
Plan	245
Permits	-
Design	2,066
Construct	56,733
Closeout	-
	59,044



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
40214021-Coyote Ck, U/S of Hwy 237	0	0	1,104	0	0	0	0	0	1,104
with inflation	0	0	1,104	0	0	0	0	0	1,104
40214022-Coyote Ck, D/S of Hwy 237	0	0	1,111	0	0	0	0	0	1,111
with inflation	0	0	1,111	0	0	0	0	0	1,111
50184003-Uvas Ck, Wren Ave to end of Levee	0	0	1,015	0	0	0	0	0	1,015
with inflation	0	0	1,015	0	0	0	0	0	1,015
50314001-West Branch Llagas Ck	0	0	1,021	0	0	0	0	0	1,021
with inflation	0	0	1,021	0	0	0	0	0	1,021
62C40392-Future Work	0	0	0	3,770	0	1,777	9,489	39,757	54,793
with inflation	0	0	0	4,000	0	2,000	11,000	49,000	65,999
TOTAL	0	0	4,251	3,770	0	1,777	9,489	39,757	59,044
with inflation	0	0	4,251	4,000	0	2,000	11,000	49,000	70,250

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
40214021-Coyote Ck, U/S of Hwy 237	0	0	0	1,104	0	0	0	0	0	1,104
40214022-Coyote Ck, D/S of Hwy 237	0	0	0	1,111	0	0	0	0	0	1,111
50184003-Uvas Ck, Wren Ave to end of Levee	0	0	0	1,015	0	0	0	0	0	1,015
50314001-West Branch Llagas Ck	0	0	0	1,021	0	0	0	0	0	1,021
62C40392-Future Work	0	0	0	0	4,000	0	2,000	11,000	49,000	65,999
TOTAL	0	0	0	4,251	4,000	0	2,000	11,000	49,000	70,250

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	70,250
Other Funding Sources	0
Total	**70,250**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project	**San Francisco Bay Shoreline**
Program	Flood Protection – Multiple Watersheds
Priority No.	87
Project No.	00044026s
District Contact	Melanie Richardson mrichardson@valleywater.org

Typical natural tidal marshland in San Francisco Bay near the Shoreline project area

PROJECT DESCRIPTION

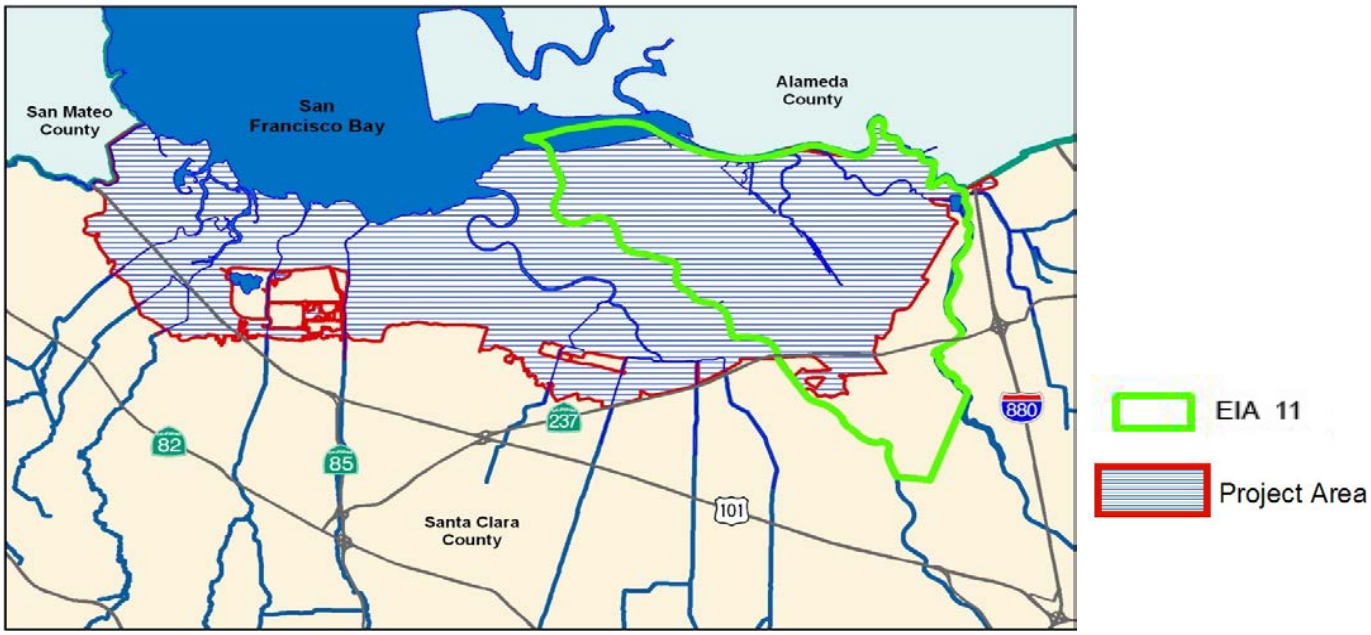
This project partners with the California Costal Conservancy, U.S. Army Corps of Engineers (Corps), and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline. The planning efforts for the North San Jose area, known as Economic Impact Area 11 (EIA 11), will be funded from project number 00044026. Safe, Clean Water funds will provide $15 million toward the District's cost share of the design and partial construction efforts for EIA 11 and $5 million toward the District's cost share of the planning efforts for the remaining EIAs to accomplish the following objectives:

- Provide integrated fluvial and one-percent tidal flood protection.
- Provide protection for future sea level rise projections.
- Restore and/or enhance tidal marsh and related habitats.
- Provide recreational and public access opportunities throughout the tidal floodplain of Santa Clara County.
- Pursue continued federal funding.
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency at completion of the Construction Phase.
- Coordinate closely with the South Bay Salt Pond Restoration Project, City of San Jose, U.S. Fish and Wildlife Services, the community and key stakeholders.

This project is accounted for in the following job numbers:

- 00044026—San Francisco Bay Shoreline
- 62044042—Shoreline, Early Implementation (Feasibility)
- 26444001—Shoreline, EIA 11 Design & Partial Constr.
- 26444002—Shoreline, Other EIAs Planning

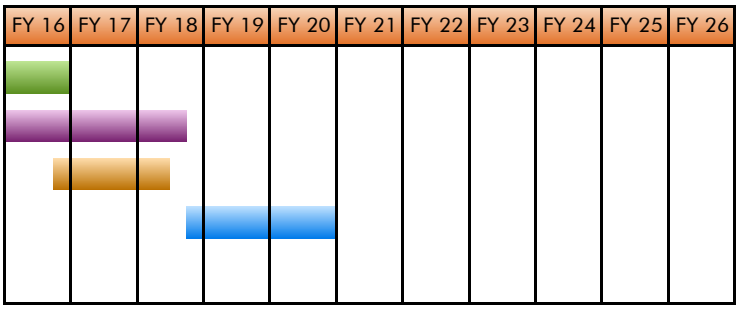
PROJECT LOCATION



SCHEDULE & STATUS

July 2003 to June 2020

Phase	Cost
Plan	13,818
Permits	487
Design	9,368
Construct	16,216
Closeout	-
	39,889



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
00044026-San Francisco Bay Shoreline	12,255	802	1,500	0	0	0	0	0	14,557
with inflation	12,255	802	1,500	0	0	0	0	0	14,557
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	359
with inflation	359	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	0	6,448	6,346	4,180	4,000	4,000	0	0	24,974
with inflation	0	6,448	6,346	4,447	4,384	4,520	0	0	26,144
26444002-Other EIAs Planning	1,021	1,695	1,040	2,800	2,800	2,800	0	0	12,156
with inflation	1,021	1,695	1,040	3,028	3,150	3,276	0	0	13,210
TOTAL	**13,635**	**8,945**	**8,631**	**6,980**	**6,800**	**6,800**	**0**	**0**	**52,046**
with inflation	**13,635**	**8,945**	**8,886**	**7,475**	**7,533**	**7,795**	**0**	**0**	**54,270**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
00044026-San Francisco Bay Shoreline	13,015	1,542	1,500	0	0	0	0	0	0	14,557
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	6,239	309	100	6,246	4,447	4,384	4,520	0	0	26,144
26444002-Other EIAs Planning	1,639	1,695	618	422	3,028	3,150	3,276	0	0	13,210
TOTAL	**21,252**	**3,546**	**2,218**	**6,668**	**7,475**	**7,533**	**7,795**	**0**	**0**	**54,270**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	12,485
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	39,354
California Department of Water Resources (Pending)	420
Total	**54,270**
Federal Partners, South Bay Salt Ponds (SBSP)	48,470
State, SBSP	14,720
Foundations, Packard-Hewlett-Goldman-Moore, SBSP	17,060
Coastal Conservancy, Shoreline	2,010
Federal, Corps of Engineers, Shoreline	8,990
Total Partnership Funding for In-kind Services	**91,250**

OPERATING COST IMPACTS

Operating costs will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**Small Capital Improvements - Regnart Creek**
Program	Flood Protection - Multiple Watersheds
Priority No.	63
Project No.	62084001
District Contact	Melanie Richardson mrichardson@valleywater.org

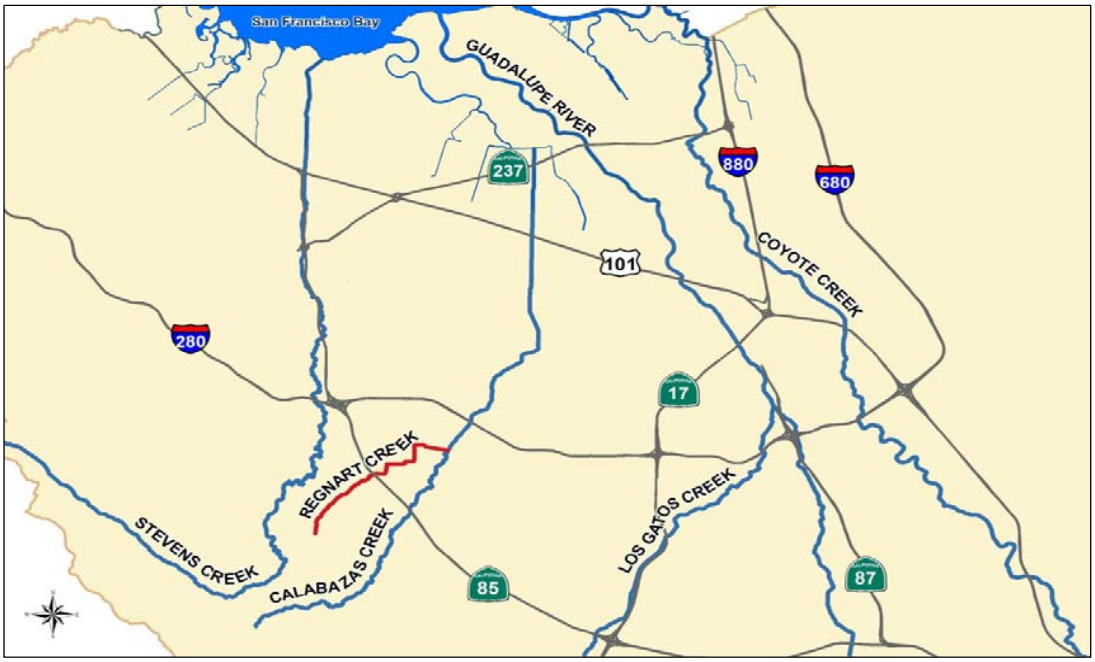
View of an outfall in need of restoration or repair

PROJECT DESCRIPTION

This project plans, designs, and constructs numerous small capital projects to address the following issues:

- Bank erosion repair.
- Geomorphic channel restoration with bed and bank repair.
- Outfall restoration and repair.
- Sediment removal and fish ladder and blockage repair.
- Fish ladder modifications and repairs.

PROJECT LOCATION



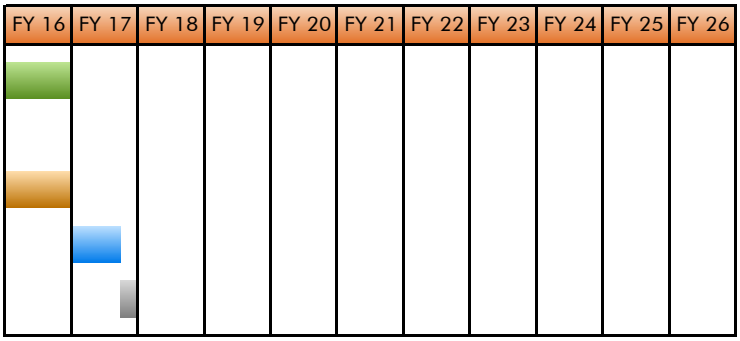
Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	100
Permits	-
Design	320
Construct	3,078
Closeout	-
	3,498



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
62084001-Small Capital Improvements - Regnart Creek	855	1,550	1,110	0	0	0	0	0	3,515
with inflation	855	1,550	1,110	0	0	0	0	0	3,515

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
62084001-Small Capital Improvements - Regnart Creek	528	2,200	323	787	0	0	0	0	0	3,515

Adjusted Budget includes adopted budget plus a planned budget adjustment of $1,500,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	3,515
Other Funding Sources	0
Total	3,515

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Water Resources Stewardship Capital Improvements

WATER RESOURCES STEWARDSHIP OVERVIEW

The District plans, designs and constructs various capital projects to meet the Board's Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and improve the quality of life in Santa Clara County." These projects may fulfill environmental enhancement, mitigation or stewardship goals and priorities.

The District has placed an emphasis on stewardship since 1999 when the Water District's Board of Directors adopted a mission and policies that added a focus on environmental stewardship. In 2001, the California legislature added environmental stewardship to the Water District's purpose. Specifically, the Water District's environmental stewardship activities focus on these three areas:

- Healthy creek and bay ecosystems
- Clean, safe water in creeks and the bay
- Improved quality of life through trails, open space and water resources management

The Water District's stewarship work is extensive. Actions to protect the environment are woven into all we do. Some of the Districts stewardship accomplishments since 2000 are:

- Rehabilitated or restored 90 acres of riparian habitat and 600 acres of tidal wetland habitat
- Provided funding for 92 projects that resulted in 71 miles of public access
- Removed over 2,660 lbs of mercury from the Guadalupe Watershed
- Made 40 miles of streams accessible for fish
- In conjunction with the Open Space Authority, acquiring 1,300 acres of land for preservation of California Red Legged Frog and California Tiger Salamander habitat

Environmental Commitment Projects

Beginning in FY 2011-12 a fourth sub-category was added to Water Resources Stewardship to clarify the differences between regulatory-driven and optional environmental enhancements. The Environmental Commitment sub-category includes projects that are implemented to satisfy agreements made with regulatory agencies that improve the watershed environment.

Environmental Enhancement Projects

Environmental Enhancement projects are constructed at the direction of the Board either to meet the Safe, Clean Water and Natural Flood Protection program (SCW) obligations or to meet other Board priorities.

The District's Safe, Clean Water Program, approved by the voters of Santa Clara County in 2012, committed funding for environmental enhancement activities that create or restore tidal or riparian habitat. A selection process will be conducted to allocate the SCW funding to the enhancement opportunities that meet Board-defined characteristics.

Major Capital Improvements Identified in the CIP

- Lake Almaden, Guadalupe River, Los Alamitos Creek Planning and Design South Bay Salt Ponds Restoration
- South Bay Salt Ponds Restoration

Mitigation Projects

The District manages many mitigation sites and continues to plan, design, and construct new mitigation sites to fulfill CEQA and regulatory permit requirements for both capital projects and operations activities. Mitigation requirements for capital projects may be incorporated into the project scope or accomplished as a separate project.

Major Capital Improvements Identified in the CIP

- SMP Mitigation, Stream and Watershed Land Preservation

Water Resources Stewardship Capital Improvements

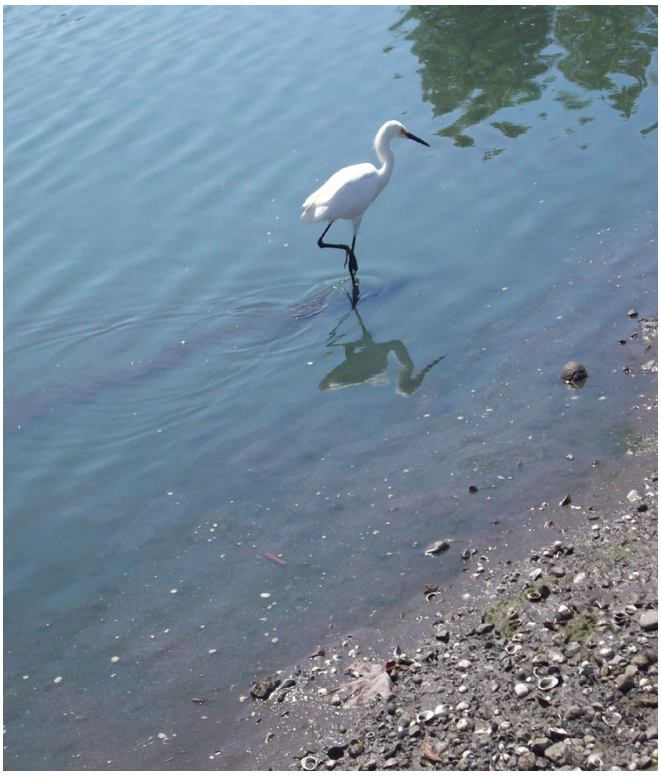
Stewardship Projects

Stewardship projects are implemented to promote water quality awareness; reduce pollutants in streams; support additional trails, parks and open space; support creek side recreation; and reduce green house gas. Stewardship projects are implemented at the discretion of the Board when reasonable and appropriate. These projects are often accomplished in partnership with or support of other agencies.

Stewardship projects may be constructed to fulfill SCW obligations or to meet other Board priorities. A selection process will be conducted to allocate SCW funding to the Stewardship projects that meet the SCW requirements.

Major Capital Improvements Identified in the CIP

- Alviso Slough Restoration
- FAHCE Stevens Creek Fish Passage Enhancement
- SCW Implementation Fund



PRIORITY PROCESS AND FINANCIAL ANALYSIS

Environmental Enhancement and Stewardship projects are implemented at the discretion of the Board. Projects may go through a ranking process to compete for Safe, Clean Water funds or the board may direct that other available revenue be used to implement the proposed projects. The inclusion of these projects in the Fiscal Year 2017-21 CIP has been approved by the Board. The priority criteria used to evaluate these projects are included in Appendix A.

Implementation of Mitigation projects is considered non-discretionary since they are needed to meet California Environmental Quality Act (CEQA) or regulatory permit commitments. Funding for mitigation projects is allocated without a prioritization process.

Financial analysis of the following funding sources for Water Resources Stewardship capital improvements was conducted to determine if there are limitations to funding currently planned capital projects.

- Watershed and Stream Stewardship Fund
- Safe, Clean Water Fund
- Water Utility Enterprise Fund

Funding needs for approved Water Resources Stewardship projects can be met.

Water Resources Stewardship Capital Improvements

The following table is a project funding schedule for water resources stewardship capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2015-16.

Water Resources Stewardship Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
	ENVIRONMENTAL COMMITMENT										
N/A	None	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL ENHANCEMENT										
26044001	Almaden Lake Improvements (D4.1a)	1,960	940	235	1,044	-	-	-	-	-	3,944
00294001s	FAHCE Stevens Creek Fish Passage Enhancement D4.x	850	-	-	-	1,506	3,226	-	-	-	5,582
26164001	Hale Creek Enhancement Pilot Study (D6)	-	462	-	482	1,627	-	-	-	-	2,571
20444001	Salt Ponds A5-11 Restoration	-	1,565	-	1,715	784	1,898	-	-	-	5,962
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)	-	1,571	-	2,203	1,472	1,410	-	-	-	6,656
26444003	South Bay Salt Ponds Restoration (D8)	517	18	326	-	1,712	1,863	-	-	-	4,110
	MITIGATION										
62184001	SMP Mitigation, Stream and Watershed Land Preservatic	14,204	1,510	-	510	860	-	-	-	-	17,084
	STEWARDSHIP										
26C40370	SCW Implementation Fund	-	-	-	-	9,257	16,531	11,060	2,405	23,658	62,911
	TOTAL	17,531	6,066	561	5,954	17,218	24,928	11,060	2,405	23,658	108,820

FY 2015-16 Funds to be reappropriated

The following table shows funding requirements from each funding source for mitigation capital improvements.

Water Resources Stewardship – Funding Sources ($K)

Fund Number	FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
61	Water Utility Enterprise Fund	765	-	-	-	2,079	3,652	775	802	7,886	15,959
12	Watershed Stream Stewardship Fund	14,289	3,075	-	2,225	2,519	2,970	775	802	7,886	34,540
26	Safe, Clean Water and Natural Flood Protection Fund	2,477	2,991	561	3,729	12,620	18,306	9,510	802	7,886	58,321
	TOTAL	17,531	6,066	561	5,954	17,218	24,928	11,060	2,405	23,658	108,820

FY 2015-16 Funds to be reappropriated

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Project	**Almaden Lake Improvements**
Program	Water Resources Stewardship – Environmental Enhancement
Priority No.	39
Project No.	26044001
District Contact	Melanie Richardson mrichardson@valleywater.org

Looking southerly at Lake Almaden, which has fish with the highest concentrations of mercury in California in 2010.

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements at Guadalupe River from Blossom Hill Road to the Guadalupe Creek/Alamitos Creek confluence, and Alamitos Creek from the Guadalupe Creek confluence to Winfield Boulevard, including Lake Almaden. This Project will evaluate alternatives aimed to reduce impacts from mercury-containing sediment to water quality and habitat, and high water temperatures and predation to anadromous fish in Almaden Lake, to accomplish the following objectives:

- Separate Alamitos Creek from Almaden Lake.
- Reduce thermal barrier to migration of anadromous fish.
- Remove entrainment and impacts from predatory species to anadromous fish.
- Reduce mercury concentration in target fish to meet applicable water quality objectives.
- Minimize impacts to recreational features.

This project is funded for the planning and design phase. Funding for construction may be available from Safe, Clean Water, Priority D.

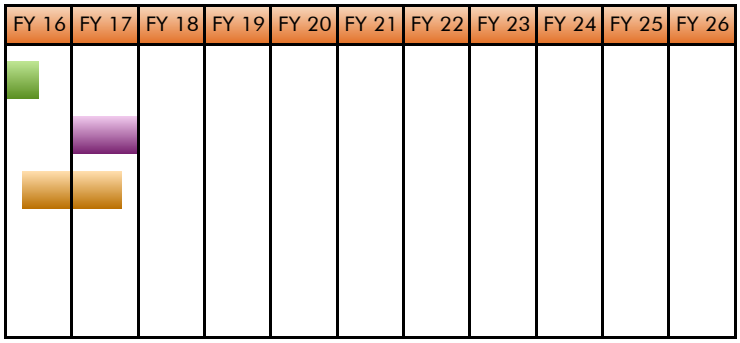
PROJECT LOCATION

SCHEDULE & STATUS

July 2011 to June 2017

Planning Phase and some Design tasks. Construction is not funded at this time.

Phase	Cost
Plan	1,360
Permits	349
Design	1,469
Construct	-
Closeout	-
	3,178



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26044001-Almaden Lake Improvements	1,900	765	1,279	0	0	0	0	0	3,944
with inflation	1,900	765	1,279	0	0	0	0	0	3,944

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26044001-Almaden Lake Improvements	1,960	940	235	1,044	0	0	0	0	0	3,944

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	800
SCWD Safe Clean Water Fund	3,144
Total	**3,944**

OPERATING COST IMPACTS

No operating cost impacts are expected from the completion of the planning and design phases of the project.

USEFUL LIFE: 100 Years

Project	**FAHCE Stevens Creek Fish Passage Enhancement**
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	40
Project No.	00294001s
District Contact	Melanie Richardson mrichardson@valleywater.org

Example of a fish ladder to be modified or reconstructed for better fish passage

PROJECT DESCRIPTION

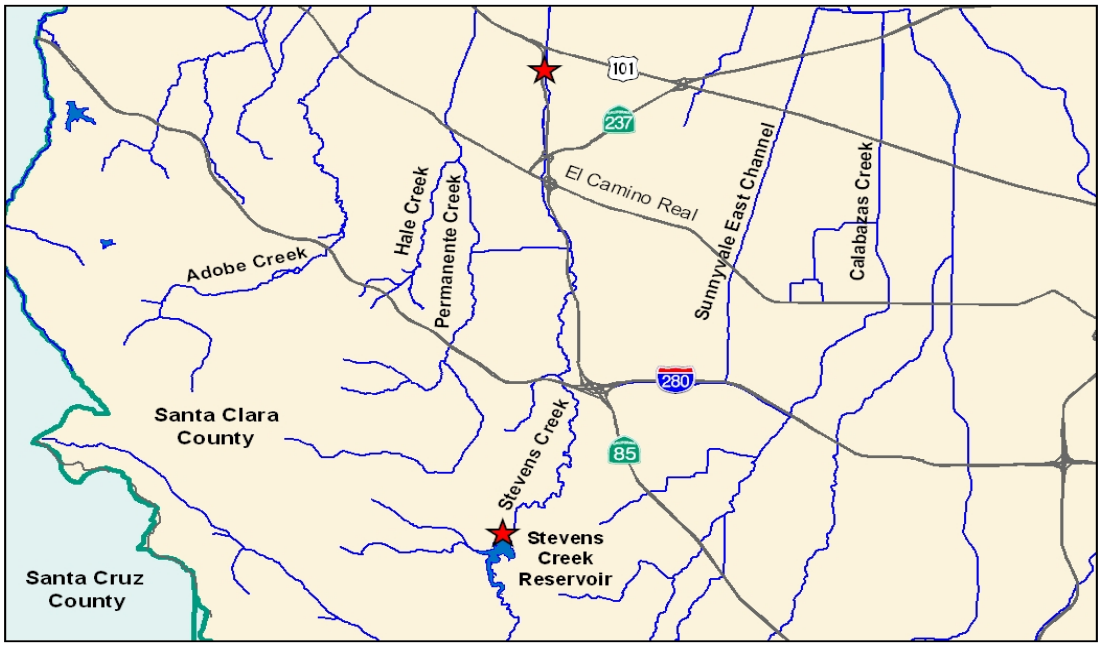
This project plans, designs, and constructs improvements to the Moffett Boulevard fish ladder to improve fish passage as well as a multiport outlet at Stevens Creek Dam to accomplish the following objectives:

- Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed.
- Provide a suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone determined on an annual basis through the development of an operations plan.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles.

This project is accounted for in the following job numbers:

- 00294001—Fish Passage Planning
- 00C40145—Moffett Boulevard Fish Ladder
- 00C40198—Multi-Port Outlet at Dam

PROJECT LOCATION



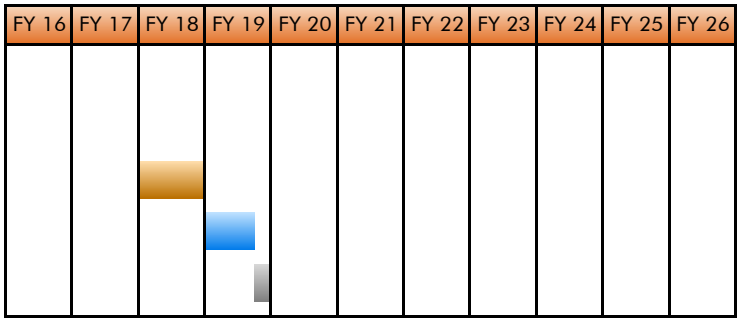
★ Project Location

SCHEDULE & STATUS

July 2008 to June 2019

Planning phase is complete. Project on hold pending completion of the Three Creeks Habitat Conservation Plan, to be done in a separate operating project.

Phase	Cost
Plan	850
Permits	104
Design	1,289
Construct	2,917
Closeout	34
	5,194



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	850
with inflation	850	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	1,110	1,907	0	0	0	3,016
with inflation	0	0	0	1,200	2,083	0	0	0	3,284
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	283	1,045	0	0	0	1,328
with inflation	0	0	0	306	1,143	0	0	0	1,449
TOTAL	**850**	**0**	**0**	**1,393**	**2,951**	**0**	**0**	**0**	**5,194**
with inflation	**850**	**0**	**0**	**1,506**	**3,226**	**0**	**0**	**0**	**5,582**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	0	1,200	2,083	0	0	0	3,284
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	0	306	1,143	0	0	0	1,449
TOTAL	**850**	**0**	**0**	**0**	**1,506**	**3,226**	**0**	**0**	**0**	**5,582**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund–10%	558
SCVWD Water Utility Enterprise Fund–90%	5,024
Total	**5,582**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Hale Creek Enhancement Pilot Study**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	67
Project No.	26164001
District Contact	Melanie Richardson mrichardson@valleywater.org

Reach to be modified downstream of 7th Day Adventist foot bridge between Marilyn Drive and North Sunshine Drive.

PROJECT DESCRIPTION

This pilot project plans, designs, and constructs improvements to an approximately 500-foot long reach in Hale Creek to accomplish the following objectives:

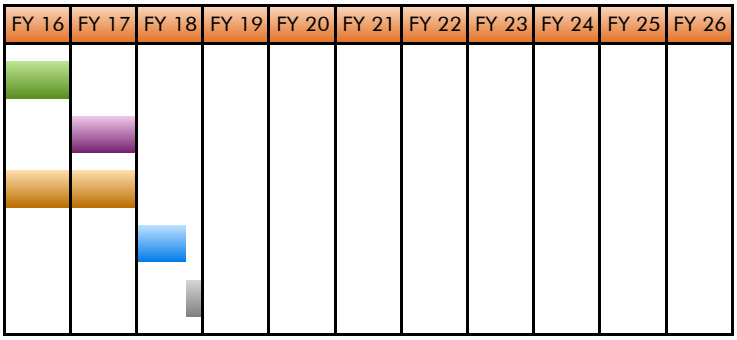
- Provide flood protection and enhance habitat values.
- Restore stream recharge capability to a concrete-lined portion.
- Remove existing concrete channel and replace with a vegetated soft-bottom channel.

PROJECT LOCATION

SCHEDULE & STATUS

May 2015 to June 2018

Phase	Cost
Plan	75
Permits	144
Design	702
Construct	1,500
Closeout	-
	2,421



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26164001-Hale Creek Enhancement Pilot Study	46	416	482	1,523	0	0	0	0	2,467
with inflation	46	416	482	1,627	0	0	0	0	2,571

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26164001-Hale Creek Enhancement Pilot Study	0	462	0	482	1,627	0	0	0	0	2,571

Adjusted Budget includes adopted budget plus a planned budget adjustment of $462,000.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	2,571
Other Funding Sources	0
Total	2,571

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: Not available

Project	**Salt Ponds A5-11 Restoration**
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	36
Project No.	20444001
District Contact	Liang Lee llee@valleywater.org

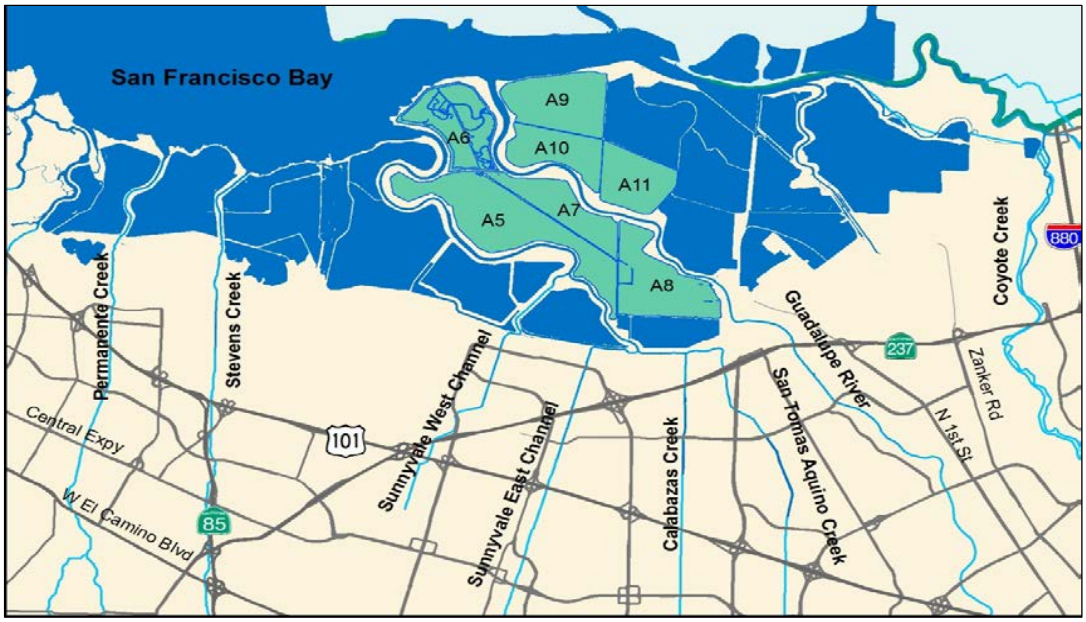
View of Notch Location at Pond A8

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the South Bay Salt Ponds (SBSP) and will collaborate with the SBSP Phase II restoration efforts to accomplish the following objectives:

- Investigate flood benefits provided by the existing salt pond levees, identify weaknesses, design correction and construct corrections to protect Santa Clara County.
- Collaborate with Phase II restoration efforts to make sure that adequate flood protection is provided.
- Collect data required to answer permitting questions on mercury and steelhead migration. Positive results should allow the Pond A8 notch to be fully operational.
- Investigate the re-alignment of Calabazas and San Tomas Creek into Pond A8 and design and implement re-alignment if feasible.

PROJECT LOCATION

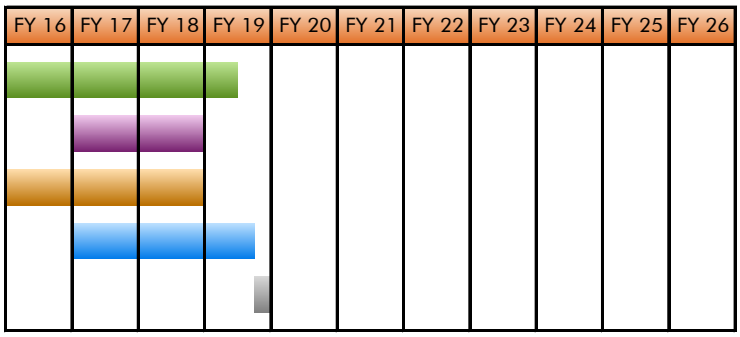


Project Location

SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost
Plan	2,372
Permits	495
Design	284
Construct	2,524
Closeout	5
	5,680



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
20444001-Salt Ponds A5-11 Restoration	47	1,518	1,715	725	1,722	0	0	0	5,727
with inflation	47	1,518	1,715	784	1,898	0	0	0	5,963

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
20444001-Salt Ponds A5-11 Restoration	0	1,565	0	1,715	784	1,898	0	0	0	5,963

Adjusted Budget includes adopted budget plus a planned budget adjustment of $47,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	5,963
Other Funding Sources	0
Total	5,963

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $4 million every 3 years, beginning in FY 2020, for on-going sediment removal.

USEFUL LIFE: Not Available

Project	**SCW Fish Passage Improvements** (Bolsa Rd.)
Program	Water Resources Stewardship - Environmental Enhancements
Priority No.	46
Project No.	26044002
District Contact	Liang Lee Llee@valleywater.org

View of the Bolsa Road fish barrier removed will be allowing fish access to upstream habitat

PROJECT DESCRIPTION

This project plans, designs and constructs improvements for two high priority fish barriers in Santa Clara County. A third priority barrier, owned by the City of San Jose, will be remediated through a project partnership with funds allocated from this project. The project will accomplish the following objectives:

- Planning, design and construction for a passage impediment at the Evelyn Bridge preventing upstream/downstream movement of steelhead in the Stevens Creek watershed. Remediation of this barrier will facilitate movement to 8.8 miles of higher quality upstream habitat and allow for out-migrant fish to access San Francisco Bay unimpeded. (Completed in 2016)
- Planning, design and construction for a passage impediment at the Bolsa Road railroad bridge in the Uvas Watershed. Remediation of this site will allow access to approximately 22 miles of higher quality habitat upstream as well as unimpeded access for out-migrant fish through the project site.
- Prepare a partnership agreement and provide technical support to the City of San Jose for removal of the Singleton Road Bridge in Coyote Creek. Removal of this passage impediment will facilitate movement of migratory fish for approximately 17.6 miles creek above the site and allow for unimpeded access of out-migrant fish through the site.

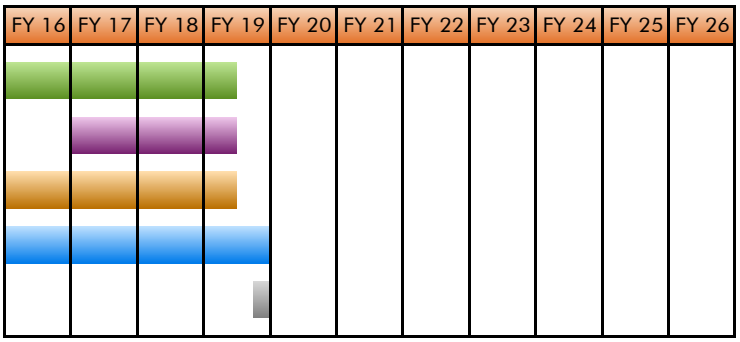
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost
Plan	671
Permits	301
Design	2,277
Construct	3,100
Closeout	75
	6,424



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	110	1,461	2,203	1,375	1,275	0	0	0	6,424
with inflation	110	1,461	2,203	1,472	1,410	0	0	0	6,656

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26044002-SCW Fish Passage Improvements (Bolsa Rd.)	0	1,571	0	2,203	1,472	1,410	0	0	0	6,656

Adjusted Budget includes adopted budget plus a planned budget adjustment of $110,000.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	6,656
Other Funding Sources	0
Total	6,656

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50 Years

Project	**South Bay Salt Ponds Restoration**
Program	Water Resources Stewardship - Environmental Enhancement
Priority No.	30
Project No.	26444003
District Contact	Liang Lee llee@valleywater.org

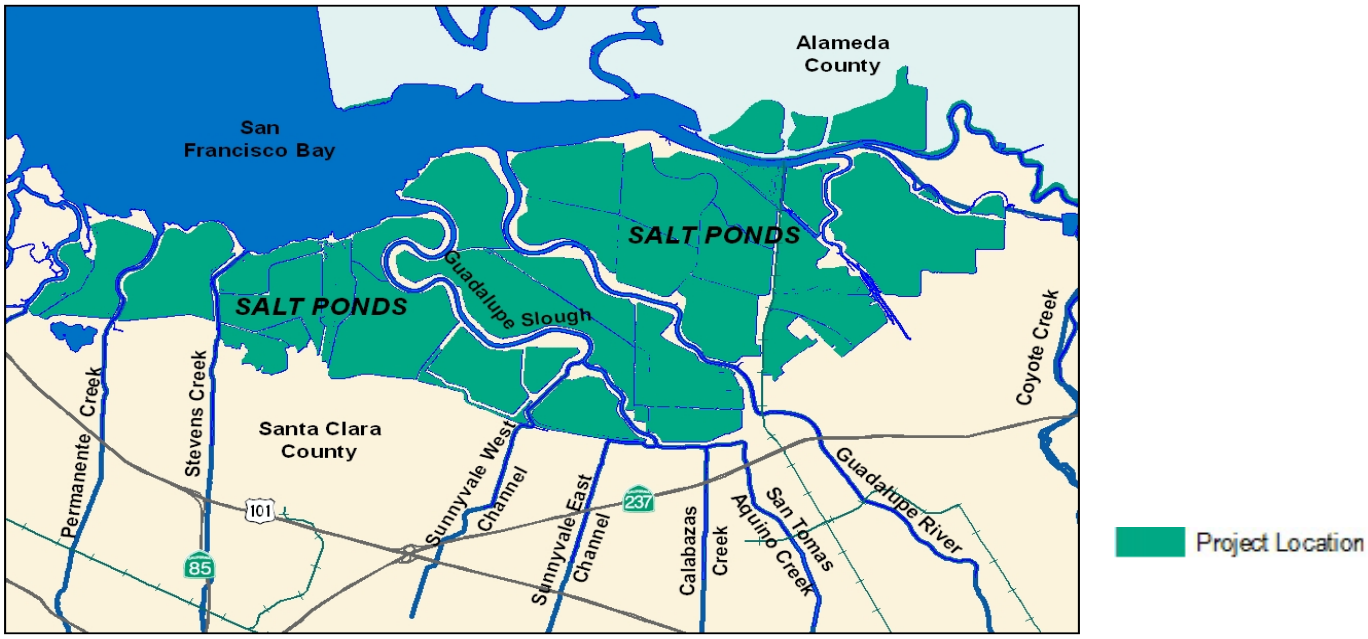
View of one of the salt evaporator facilities near Alviso

PROJECT DESCRIPTION

This project implements a planning study to investigate possible improvements to the South Bay Salt Ponds to accomplish the following objectives:

- Provide for beneficial reuse of dredge material, including materials excavated from the District's Stream Maintenance Program.
- Provide sediment disposal, storage, and reuse for a 5-year period.
- Examine restoration opportunities for riparian and wildlife habitat.

PROJECT LOCATION



SCHEDULE & STATUS

June 2013 to June 2019

Planning Study Only

Phase	Cost
Plan	3,601
Permits	18
Design	-
Construct	-
Closeout	-
	3,619

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26444003-South Bay Salt Ponds Restoration	191	18	269	1,636	1,656	0	0	0	3,770
with inflation	191	18	269	1,769	1,863	0	0	0	4,110

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26444003-South Bay Salt Ponds Restoration	517	18	326	0	1,712	1,863	0	0	0	4,110

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	4,110
Other Funding Sources	0
Total	4,110

OPERATING COST IMPACTS

Planning Phase Only: The completion of this phase of the project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE: Not Available

Project	**SMP Mitigation Stream and Watershed Land Preservation**
Program	Water Resources Stewardship – Mitigation
Priority No.	99
Project No.	62184001
District Contact	Melanie Richardson mrichardson@valleywater.org

Creek-side settings such as this will be used for stream and watershed land preservation. Actual locations will differ.

PROJECT DESCRIPTION

This project preserves streams and watershed lands in the Santa Clara Basin and implements appropriate restorations in these lands to accomplish the following objectives:

- Provide 71 acres of Stream Maintenance Program (SMP) mitigation credits through preservation of approximately 720 to 950 acres of streams and watershed lands to provide long-term protection of unique and valuable local stream resources and watersheds, in a largely self-sustaining setting. Approximately 108 acres of the total land preservation will be for protection of riparian and upland habitats that are known to support California red-legged frogs and Western pond turtles.
- Provide approximately 10 acres of SMP mitigation credits through environmental restoration on the lands acquired.
- Seek opportunities to partner with other organizations to accomplish the project objectives.

PROJECT LOCATION

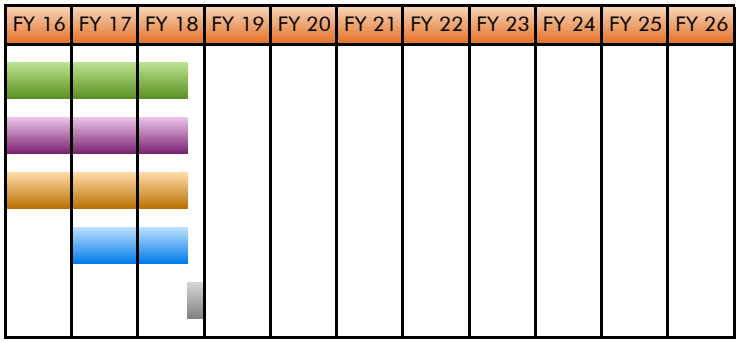
The project will purchase multiple sites for preservation in Santa Clara Basin as they become available.
No map is provided.

SCHEDULE & STATUS

July 2003 to June 2018

Some environmental tasks in the planning phase continue thru construction. Land acquisition is shown in the design phase, with restoration of site habitat shown in the construction phase.

Phase	Cost
Plan	3,048
Permits	820
Design	12,092
Construct	905
Closeout	20
	16,885



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	12,196	3,518	510	801	0	0	0	0	17,025
with inflation	12,196	3,518	510	860	0	0	0	0	17,084

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
62184001-SMP Mitigation Stream and Watershed Land Preservation	14,204	1,510	0	510	860	0	0	0	0	17,084

Adjusted Budget includes adopted budget plus a planned budget adjustment of $715,000.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,084
Other Funding Source	0
Total	17,084

OPERATING COST IMPACTS

Operating cost will vary, depending on the type of acquisition ownership and requirements for maintenance of each site. The Stevens Canyon Ranch Conservation Easement was acquired in December 2006 and there are no operating impacts to the District. The property owner, Mid-Peninsula Regional Open Space District is responsible for maintenance and management of the site.

USEFUL LIFE: 50+ Years

Project	**SCW Implementation Fund**
Program	Water Resources Stewardship
Priority No.	38
Project No.	26C40370
District Contact	Melanie Richardson Mrichardson@valleywater.org

Aerial view looking downstream of the Ogier Pond complex. This is just one possible site under consideration.

PROJECT DESCRIPTION

This project is a placeholder for future capital projects that have not been fully defined. These projects will implement Safe Clean Water (SCW) objectives and are likely to include projects such as Comer Debris Basin, and construction of Lake Almaden-Guadalupe River-Alamitos Creek Restoration. Funds will be moved from this project into actual projects once they have been defined and vetted to ensure they meet the following program objectives:

- Create favorable stream conditions to restore and maintain fisheries.
- Increase the stability of stream channels through construction based on geomorphic principals.
- Acquisition of property for the conservation of habitat.

PROJECT LOCATION

No map is provided for this project

SCHEDULE & STATUS

July 2014 to June 2028

Data shown here is based on preliminary information. Specific projects identified to move forward will require further refinement. A Phase schedule will be defined in the planning phase.

Phase	Cost
Plan	-
Design	-
Construct	62,911
Closeout	-
	62,911

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
26C40370-SCW Implementation Fund	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911
with inflation	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
26C40370-SCW Implementation Fund	0	0	0	0	9,257	16,531	11,060	2,405	23,658	62,911

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	41,039
SCVWD Water Utility Enterprise Fund	10,936
SCVWD Watershed and Stream Stewardship Fund	10,936
Total	**62,911**

OPERATING COST IMPACTS

Not Available

USEFUL LIFE: Not Available

Building and Grounds Capital Improvements

BUILDINGS AND GROUNDS OVERVIEW

The District's Almaden-Winfield campus occupies nearly 50 acres along Almaden Expressway in the City of San Jose. The District manages the campus to ensure a healthful and safe work environment for employees and visitors. The campus includes 10 buildings, multiple parking lots, a corporation yard, landscaping, and other appurtenances.

With most of the buildings on campus over 30 years old, the rehabilitation needs increased steadily in recent years. The District administers an asset management program for its buildings and grounds infrastructure that includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

In January of 2012 the Board approved implementation of the Campus Master Plan which includes the following:

- Repair and rehabilitate the existing Corporation yard.
- Repair Winfield Warehouse and Winfield Vegetation buidlings.
- Replace the Maintenance Office and Ready Room buildings.

Major Capital Improvements Identified in the CIP

- Almaden & Winfield Campus Small Capital Improvements
- Winfield Capital Improvements
- Headquarters Operations Building

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the buildings and grounds projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the following funding sources for buildings and grounds capital improvements was conducted to determine if there are limitations to funding all the proposed capital projects.

- Watershed and Stream Stewardship Fund
- General Fund
- Water Utility Enterprise Fund

Results of this year's prioritization process and financial analysis are summarized in Appendix B. The process concluded that the Almaden and Winfield Campus Small Capital Improvements will continue to be funded at $2 million per year to meet the higher priority Buildings and Grounds needs. The first of the projects from the Campus Master Plan began in FY 2012-13 and the Headquarters Operations Building was added to the FY 2015-19 CIP.

Building and Grounds Capital Improvements

The following table is a project funding schedule for buildings and grounds capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2015-16.

Buildings and Grounds Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
60204016	Almaden and Winfield Campus, Small Capital Improven	n/a	1,880	-	2,062	2,126	2,192	2,260	2,324	27,526	40,370
60204032	Headquarters Operations Building	219	957	1,060	-	987	3,825	6,949	4,867	-	17,804
60204021	Winfield Capital Improvements	1,685	7,618	7,474	5,927	622	-	-	-	-	15,852
	TOTAL	1,904	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	74,026

FY 2015-16 Funds to be reappropriated

The following table shows funding requirements from each funding source for buildings and grounds capital improvements.

Buildings and Grounds – Funding Sources ($K)

Fund Number	FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
11	General Fund	1,904	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	74,026
	TOTAL	1,904	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	74,026

FY 2015-16 Funds to be reappropriated

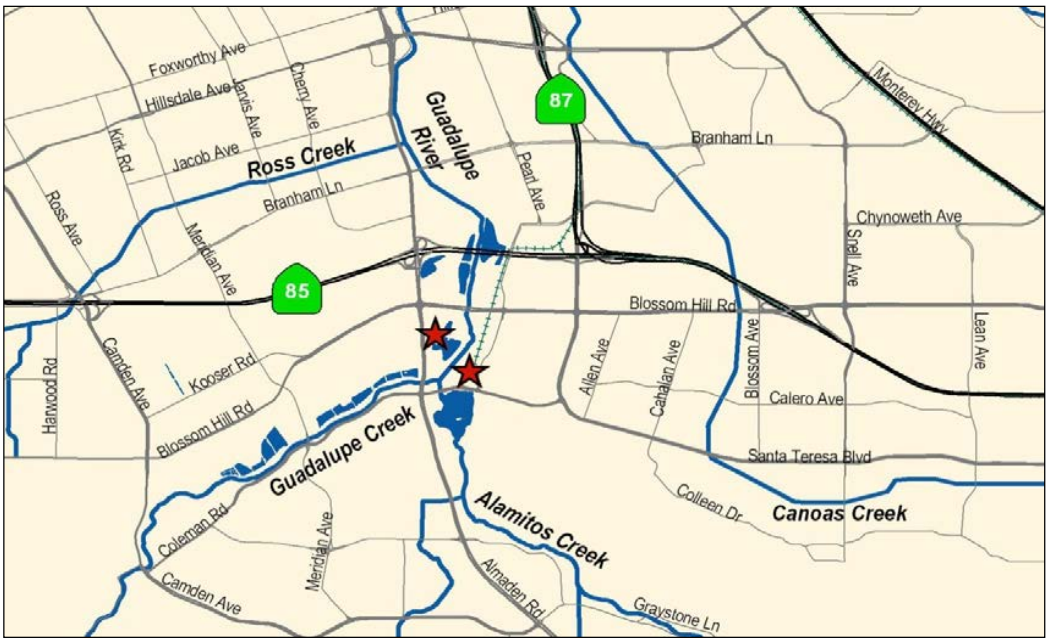
Project	**Almaden and Winfield Campus, Small Capital Improvements**
Program	Buildings and Grounds
Priority No.	73
Project No.	60204016
District Contact	Ravi Subramanian rsubramanian@valleywater.org

Front view of the Headquarters building at the Almaden Campus

PROJECT DESCRIPTION

This project reserves funding for capital maintenance and replacement of buildings, grounds, and facilities on the Almaden and Winfield campus, to provide a healthy and safe environment for staff and visitors.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

Improvements will be managed on an as-needed basis throughout the year.

Phase	Cost	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Plan	n/a											
Design	n/a											
Construct	n/a											
Closeout	n/a											
	n/a											

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	1,880	2,062	2,000	2,000	2,000	2,000	20,000	31,942
with inflation	n/a	1,880	2,062	2,126	2,192	2,260	2,324	27,527	40,371

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
60204016-Almaden and Winfield Campus, Small Capital Improvements	n/a	1,880	0	2,062	2,126	2,192	2,260	2,324	27,527	40,371

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	40,371
Other Funding Source	0
Total	**40,371**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs. The purpose of these maintenance projects is to avoid unnecessary financial impact caused by building shut-down and work stoppage.

USEFUL LIFE: Not Available

Project	**Headquarters Operations Building**
Program	Buildings and Grounds
Priority No.	65
Project No.	60204032
District Contact	Katherine Oven koven@valleywater.org

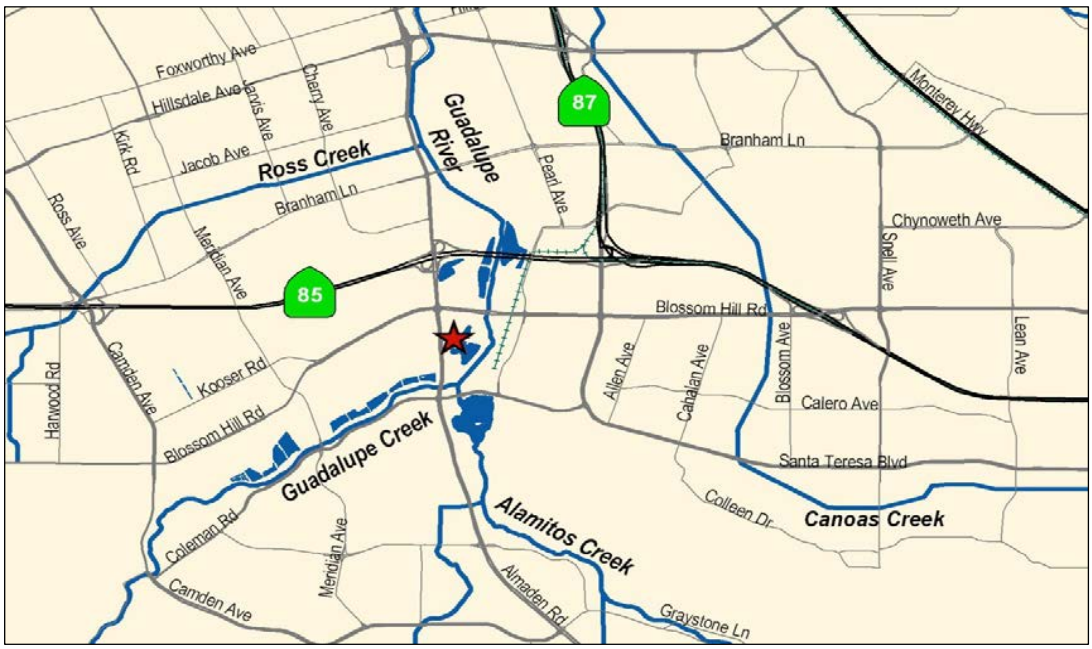
Existing Maintenance Building

PROJECT DESCRIPTION

This project plans, designs, and constructs a new operations building to replace the existing facility that has extensive deficiencies throughout. This project accomplishes the following objectives:

- Replace the Maintenance Office Building to provide a safe and healthy work environment and to meet code or regulatory requirements.
- Provide adequate and sufficient space to enable the District to efficiently perform its core business.

PROJECT LOCATION

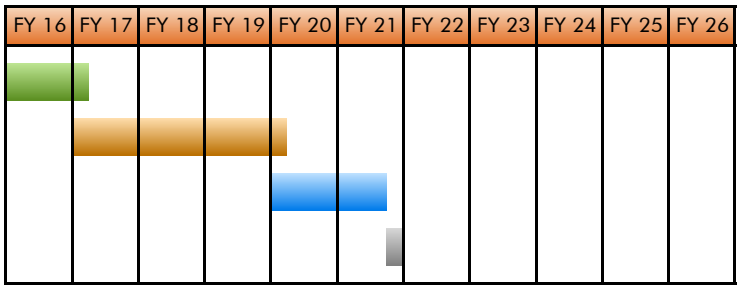


★ Project Location

SCHEDULE & STATUS

July 2014 to June 2021

Phase	Cost
Plan	2,998
Design	1,857
Construct	10,478
Closeout	23
	15,356



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
60204032-Headquarters Operations Building	16	100	100	1,800	3,400	5,940	4,000	0	15,356
with inflation	16	100	100	1,947	3,825	6,949	4,867	0	17,803

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
60204032-Headquarters Operations Building	219	957	1,060	0	987	3,825	6,949	4,867	0	17,803

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	17,803
Other Funding Sources	0
Total	17,803

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: Not Available

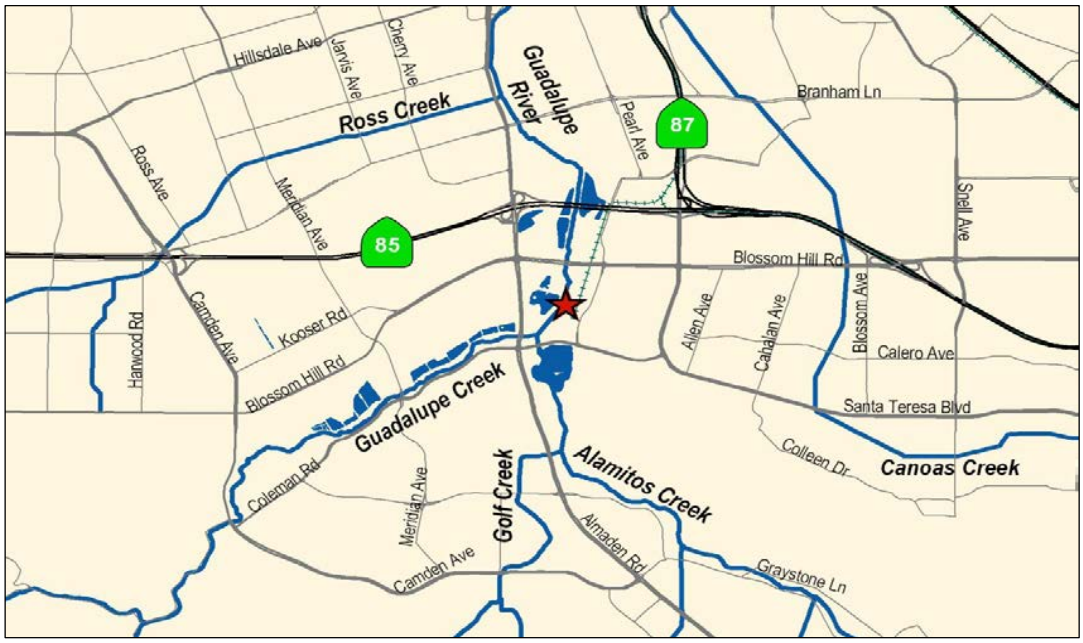
Project	**Winfield Capital Improvements**
Program	Buildings and Grounds
Priority No.	70
Project No.	60204021
District Contact	Katherine Oven koven@valleywater.org

A view of the District's Vegetation Management building on Winfield Blvd

PROJECT DESCRIPTION

This project is to repair, maintain and improve the Winfield Warehouse and Winfield Vegetation Buildings, to provide a healthy and safe environment for staff and visitors. This includes improving restroom and shower facilities, enclosing the open section of the warehouse and providing a safe and fully functioning Class IV workshop, seismic upgrades and a new roof.

PROJECT LOCATION

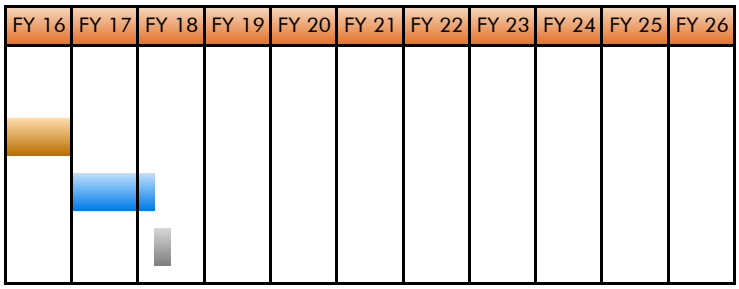


★ Project Location

SCHEDULE & STATUS

September 2012 to December 2017

Phase	Cost
Plan	97
Design	1,316
Construct	13,976
Closeout	25
	15,414



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
60204021-Winfield Capital Improvements	1,279	550	13,401	575	0	0	0	0	15,805
with inflation	1,279	550	13,401	622	0	0	0	0	15,852

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
60204021-Winfield Capital Improvements	1,685	7,618	7,474	5,927	622	0	0	0	0	15,852

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	15,852
Other Funding Source	0
Total	15,852

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs.

USEFUL LIFE: Not Available

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

The District relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, the District completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects.

In 2014, the Information Technology Capital Fund was created, it accounts for the costs to aquire, and install capital information technology projects with District-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Information Technology Disaster Recovery
- PeopleSoft System Upgrade and Expansion
- Data Consolidation
- Software Upgrades & Enhancements
- WTP-WQL Network Equipment

PRIORITY PROCESS AND FINANCIAL ANALYSIS

A rigorous priority setting process was conducted to rate the information technology projects against other types of capital improvements. The priority criteria used are included in Appendix A.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects. Results of this year's prioritization process and financial analysis are summarized in Appendix B. Funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's priority process and financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2015-16.

Information Technology Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
73274009	Data Consolidation	-	336	-	325	271	281	-	-	-	1,213
73274001	IT Disaster Recovery	208	354	-	1,393	457	-	-	-	-	2,412
60274062s	PeopleSoft System Upgrade & Expansion	5,662	-	1,749	2,415	765	-	-	-	-	8,842
73274008	Software Upgrades & Enhancements	-	1,224	234	9	422	405	880	1,004	13,698	17,642
95274003	WTP-WQL Network Equipment	473	267	12	180	757	407	166	-	6,738	8,988
	TOTAL	6,343	2,181	1,995	4,322	2,672	1,093	1,046	1,004	20,436	39,097

FY 2015-16 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology – Funding Sources ($K)

Fund Number	FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
61	Water Utility Enterprise Fund	473	267	12	180	757	407	166	-	6,738	8,988
11	General Fund	1,199	-	-	-	-	-	-	-	-	1,199
73	Information Technology Fund	4,671	1,914	1,983	4,142	1,915	686	880	1,004	13,698	28,910
	TOTAL	6,343	2,181	1,995	4,322	2,672	1,093	1,046	1,004	20,436	39,097

FY 2015-16 Funds to be reappropriated

Project	**Data Consolidation**
Program	Information Technology
Priority No.	40
Project No.	73274009
District Contact	Sudhanshu Tikekar STikekar@valleywater.org

No Photo is provided for this project.

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data Consolidation to accomplish the following objectives:

- Implement a Enterprise Content Management system with strong Business Intelligence.
- Move from a applications centric model (current) to a data centric model thereby removing silos of data stores.
- Information management for big data. Manage data as a strategic, core asset, with ongoing process and management control for big data analytics.
- High-Performance analytics for big data. Gain rapid insights from big data and the ability to solve increasingly complex business problems.
- Reduce the overall data footprint. Identify duplicate, and unstructured data and delete it.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2019

Phase	Cost
Plan	-
Design	-
Construct	1,162
Closeout	-
	1,162

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
73274009-Data Consolidation	0	336	325	251	250	0	0	0	1,162
with inflation	0	336	325	271	281	0	0	0	1,214

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
73274009-Data Consolidation	0	336	0	325	271	281	0	0	0	1,214

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	1,214
Other Funding Sources	0
Total	**1,214**

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**Information Technology Disaster Recovery**
Program	Information Technology
Priority No.	54
Project No.	73274001
District Contact	Sudhanshu Tikekar stikekar@valleywater.org

Existing Data Center that houses critical servers supporting the District's normal operations

PROJECT DESCRIPTION

This project plans and designs improvements to Information Technology to accomplish the following objectives:

- Enable coordinated, rapid recovery from a disaster.
- Reduce the District's business risk exposure.

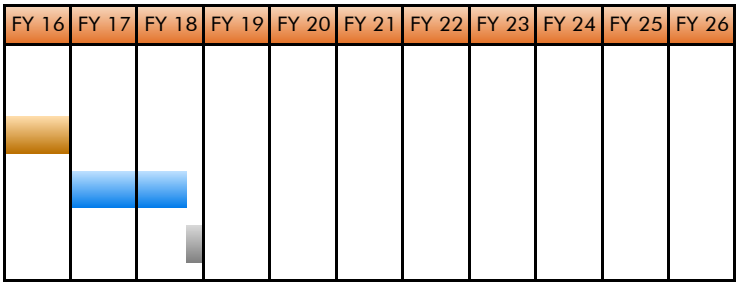
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to June 2017

Phase	Cost
Plan	-
Design	287
Construct	2,093
Closeout	-
	2,380



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
73274001-Information Technology Disaster Recovery	25	537	1,393	427	0	0	0	0	2,382
with inflation	25	537	1,393	457	0	0	0	0	2,412

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
73274001-Information Technology Disaster Recovery	208	354	0	1,393	457	0	0	0	0	2,412

FUNDING SOURCES

(in thousands $)

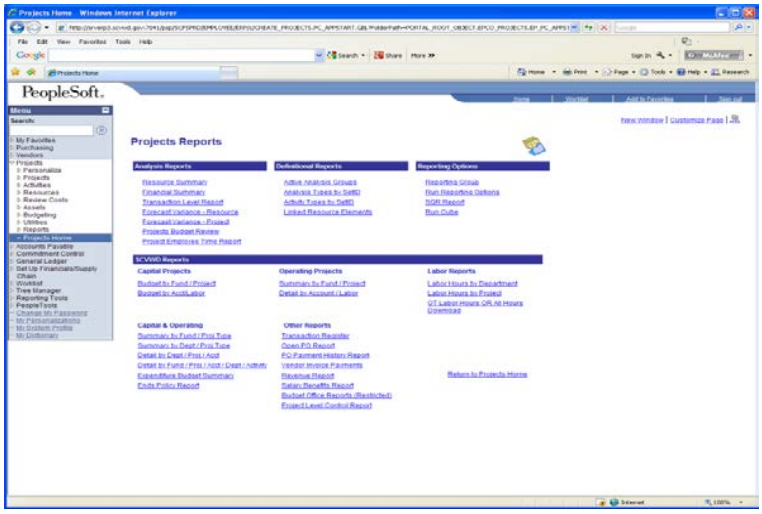
SCVWD Information Technology Fund	2,412
Other Funding Sources	0
Total	2,412

OPERATING COST IMPACTS

Ongoing annual costs will need to be determined and be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**PeopleSoft System Upgrade and Expansion**
Program	Information Technology
Priority No.	70
Project No.	60274062s
District Contact	Sudhanshu Tikekar stikekar@valleywater.org



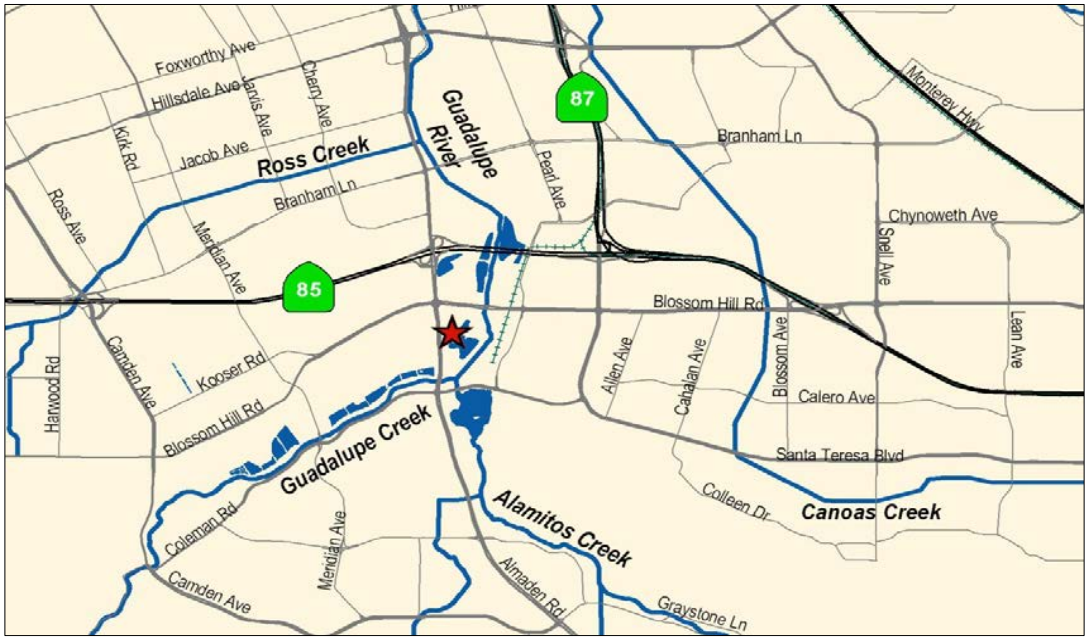
PeopleSoft Reports page from the District's intranet

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to the existing PeopleSoft system in order to accomplish the following objectives:

- Ensure the District has a current and functionally robust enterprise resource planning (ERP) solution, incorporating finance/human resource, timekeeping, planning and budgeting, and procurement functionality.
- Fully automate the District's financial and human resources management functions.
- Automate the tracking and reporting of the District's labor effort and employee leave.
- Automatically apply the District's business rules to employee time records.

PROJECT LOCATION

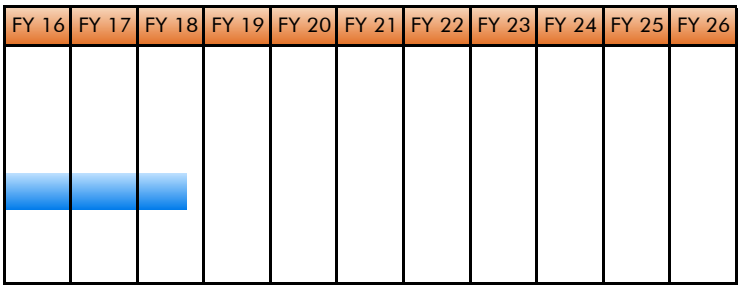


★ Project Location

SCHEDULE & STATUS

July 2013 to February 2018

Phase	Cost
Plan	-
Design	-
Construct	8,606
Closeout	-
	8,606



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	433	2,281	4,164	707	0	0	0	0	7,585
with inflation	433	2,281	4,164	765	0	0	0	0	7,643
TOTAL	1,632	2,281	4,164	707	0	0	0	0	8,784
with inflation	1,632	2,281	4,164	765	0	0	0	0	8,842

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
60274062-PeopleSoft System Upgrade and Expansion	1,199	0	0	0	0	0	0	0	0	1,199
73274002-PeopleSoft System Upgrade and Expansion	4,463	0	1,749	2,415	765	0	0	0	0	7,643
TOTAL	5,662	0	1,749	2,415	765	0	0	0	0	8,842

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	7,643
Total	8,842

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be needed for expanded technical support for new system modules and features and to continue with operational refinements, enhancements, integrations, report development, etc. on an on-going annual basis. PeopleSoft software maintenance fees are required on an annual recurring basis and projected to increase by three percent each year. The projected annual software maintenance fee for FY 2019 is approximately $164,324.

USEFUL LIFE: 5 Years

Project	Software Upgrades & Enhancements
Program	Information Technology
Priority No.	55
Project No.	73274008
District Contact	Sudhanshu Tikekar stikekar@valleywater.org

Existing District Systems to be upgraded and enahanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing District systems including GIS, Maximo, Oracle Development system, internal and external District websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate upgrade activities into a single project for better organization, planning and budgeting purposes (the exception is Peoplesoft which has its own upgrade project).

The objective of this project is to regularly upgrade existing software packages to:

- Reduce current risks associated with being on a software version that is no longer supported by the vendor and is running on outdated operating systems.
- Increase the level of service provided by the software with new functionalities.

PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2031

Phase	Cost
Plan	-
Design	-
Construct	12,696
Closeout	-
	12,696

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
73274008-Software Upgrades & Enhancements	0	990	243	390	360	752	825	9,136	12,696
with inflation	0	990	243	422	405	880	1,004	13,698	17,641

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
73274008-Software Upgrades & Enhancements	0	1,224	234	9	422	405	880	1,004	13,698	17,641

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	17,641
Other Funding Sources	0
Total	17,641

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**WTP-WQL Network Equipment**
Program	Information Technology
Priority No.	54
Project No.	95274003
District Contact	Sudhanshu Tikekar stikekar@valleywater.org

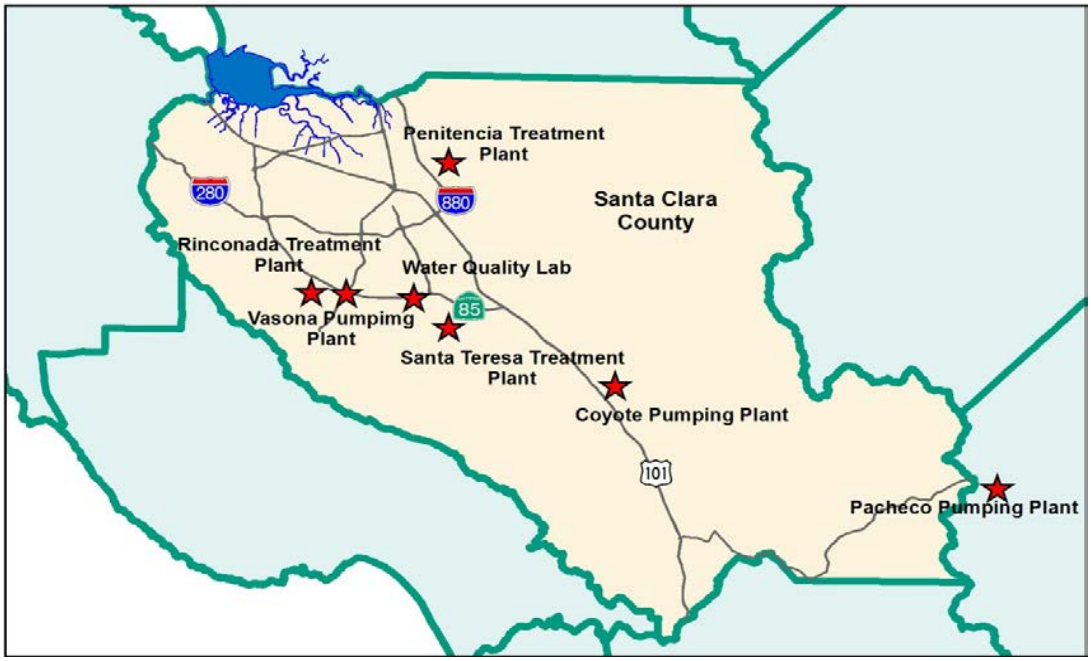
View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that the District has a current and robust computer network to accomplish the following objectives:

- Deliver greater access speeds.
- Restore vendor maintenance.
- Improve software application performance.
- Provide a path to meet future data communications needs.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2014 to June 2030

Phase	Cost
Plan	-
Design	-
Construct	6,852
Closeout	-
	6,852

FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY15	FY16	FY17	FY18	FY19	FY20	FY21	Future	
95274003-WTP-WQL Network Equipment	461	267	192	700	362	142	0	4,728	6,852
with inflation	461	267	192	757	407	166	0	6,737	8,987

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY15	FY16		FY17	FY18	FY19	FY20	FY21	Future	
95274003-WTP-WQL Network Equipment	473	267	12	180	757	407	166	0	6,737	8,987

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,987
Other Funding Sources	0
Total	8,987

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by $37,000 beginning in FY2031 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years

Financial Planning and Summary

CIP FINANCIAL PLANNING

Board policy regarding financial planning and budgeting provides the foundation for CIP financial planning. The policy states:

Executive Limitation EL-4, "Financial planning for any fiscal year shall be aligned with the Board's Ends, not risk fiscal jeopardy, and be derived from a multi-year plan."

> Executive Limitation EL-4.3, "A BAO shall include credible projection of revenues and expenses, separation of capital and operational items, cash flow, and disclosure of planning assumptions."
>
> Executive Limitation EL-4.4, "A BAO shall plan the expenditure in any budget period within the funds that are conservatively projected to be received or appropriated from reserves in that period."

KEY REVENUES SOURCES

Water Charges

- Water charges include a ground water production charge, which is equivalent to the basic user charge, and is associated with the benefit of managing groundwater supplies. The groundwater charge is applied to water extracted from the groundwater basin in Zones W-2 and W-5. The basic user charge is applied to other types of water delivered by the District. There are two rates: one for agricultural water and one for municipal and industrial water.

- A treated water surcharge, which is associated with the benefit of receiving treated water, is levied in addition to the basic user charge on water delivered from the District's water treatment plants.

Property Tax

Santa Clara County allocates property tax revenue to the District from ad valorem taxes levied on land within the county.

Special Parcel Tax

A special parcel tax, with a 2016 sunset, was approved by the voters in Santa Clara County in November 2000. This revenue source was restricted to financing the costs of the District's Clean, Safe Creeks and Natural Flood Protection Program. In November 2012 the special parcel tax was continued by voter approval to 2028. This revenue can be used for both the continuing Clean, Safe Creeks and new Safe, Clean Water programs.

Benefit Assessments

Benefit assessment revenue consists of levies approved by voters in 1986 and 1990 to support financing for flood control capital improvements. The current FY 2015-16 budget amount is approximately 1.25 times the duly authorized annual debt service requirements for each Watershed.

Capital Reimbursements

Capital reimbursement revenues are from local, state and federal partners for capital projects carried on cooperatively by the District and its partners. The District fronts the partners' shares of capital expenditures and receives reimbursements from the partners at a later time.

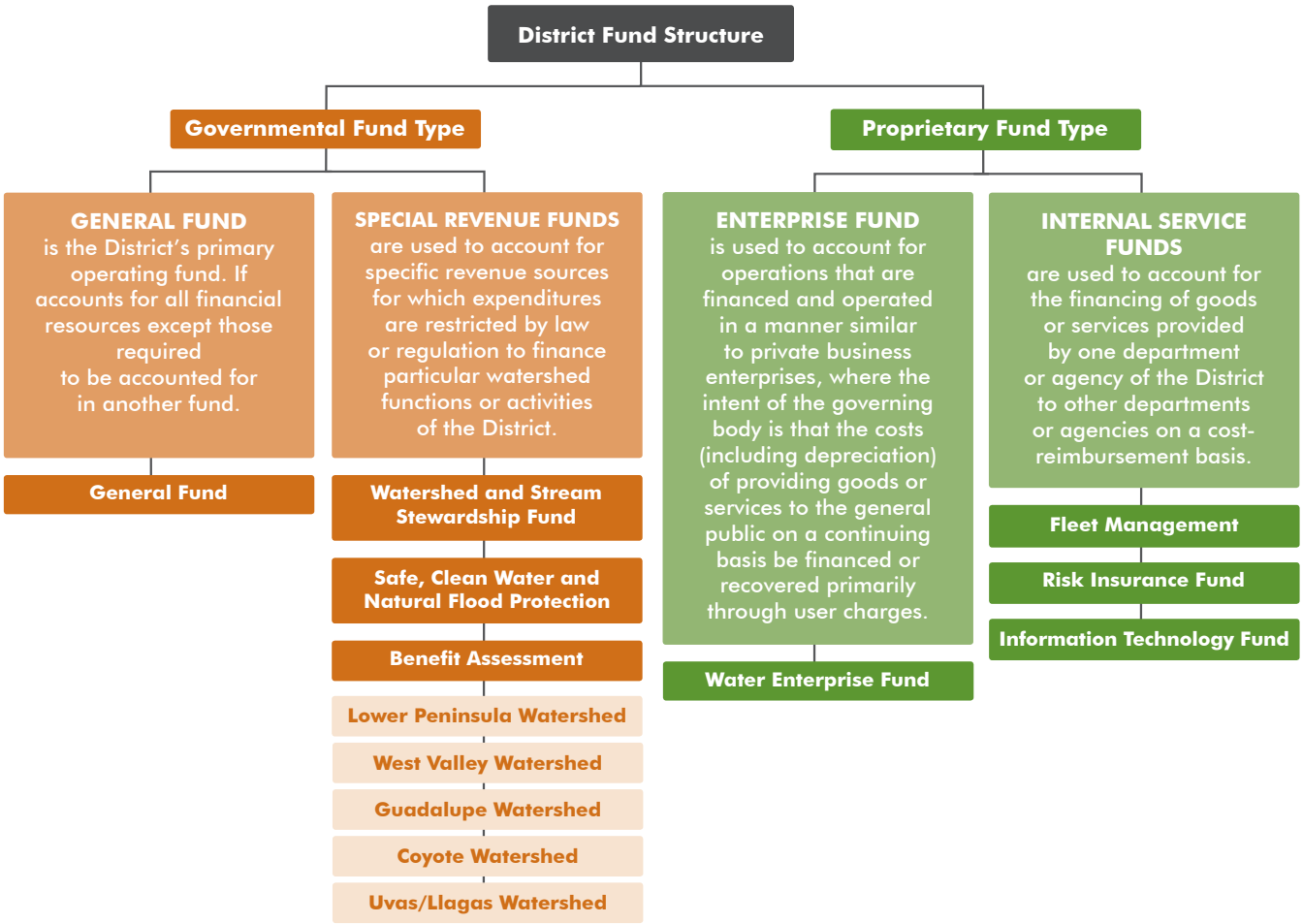
Interest

Interest is earned from the District's investment portfolio.

Financial Planning and Summary

District Fund Structure

The District's revenue sources are organized into eight funds. Each fund has specific revenue sources according to their intended purposes, and each fund is an independent accounting entity with a self-balancing set of accounts comprised of its assets, liabilities, fund equity, revenue, and expenditures or expenses, as appropriate.



Revenue by Fund ($K)

FUND NAME	FY16 Budget	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
Water Utility Enterprise	205,319	237,761	276,553	319,272	381,526	438,264	474,441	515,022	536,897	559,504	585,594
Watershed Stream Stewardship	79,823	96,930	88,350	76,748	78,154	80,977	83,961	86,993	90,097	93,362	97,197
Safe, Clean Water and Natural Flood Protection	49,063	62,410	60,661	77,225	54,876	50,650	50,378	52,242	54,285	56,585	58,826
Benefit Assessment	14,778	14,785	14,778	14,778	13,447	13,458	13,457	13,448	13,443	6,850	6,855
General	6,405	6,596	6,828	7,067	7,316	7,572	7,838	8,114	8,399	8,694	8,999
Internal Service	155	230	227	236	246	256	264	276	289	299	309
TOTAL	355,542	418,712	447,395	495,326	535,565	591,177	630,341	676,094	703,410	725,295	757,781

Note: Internal Service Funds (ISF) is the combination of the Fleet Management, IT Capital, and Risk Funds

Revenue Projections

The District regularly updates the projected revenues based on the best information available.

- Revenues from water charges are estimated based on projections of water demand for residential, commercial and industrial, and agricultural consumption combined with rates per acre-foot. Rates are set at a level that will provide revenue needed to meet operating and capital needs.
- Revenues from property taxes, special parcel taxes, and benefit assessments are estimated based on projection of growth in assessed value and number of developed parcels in Santa Clara County.
- Interest earnings are estimated based on the projected average cash balances during the fiscal year and expected yield from the District's investment portfolio.
- Revenue from capital reimbursements partnerships are estimated based on the terms of agreements executed by the District and its partners.

Expenditure Projections

The District regularly updates the operation and capital expenditures based on the best information available.

Each capital project cost estimate includes the yearly expenditures through completion based on the project's scope and schedule. The expenditures are monitored regularly and updated when necessary, e.g. expenditures are updated when a project's scope changes. A management review process is enforced to ensure only justified expenditure changes are approved.

Operation cost projections for the next 15 years are updated annually and are based on assumptions derived from the District's strategic plans, including the impact of completed capital projects. Capital and operations expenditure projections are the foundation for the development of the District's budget.

Financial Analysis

The District regularly performs financial analysis to comply with the Board's Financial Planning/Budgeting Policy. The District uses sophisticated financial models to perform the analysis for each fund. The projected operation expenditures, capital expenditures, and revenues for the next ten years are incorporated into the financial models to analyze the health of each fund under various economic scenarios. This process assures that funds will be available when needed to implement the CIP.

The financial analysis generates alternatives for funding capital projects based on the available yearly revenues, from all sources, allocated to the capital program, and the debt financing capacity of each fund. The financial analysis establishes the parameters within which the capital project schedule is developed.

Debt Projections and Debt Ratios

Debt is managed at the District depending on the type of District business involved. The SCW program approved by the voters in 2012 includes the authority to issue debt against future revenue in order to accelerate completion of projects sooner. Debt service on outstanding benefit assessment debt is funded by benefit assessments levied on property owners in the county.

The water utility business, on the other hand, uses a combination of short-term and long-term debt financing in conjunction with pay-as-you-go financing to lessen impacts to the water rate caused by fluctuations in capital funding needs. In the 1984 general election, Measure B was passed by the voters, which gave the District's water utility the authority to issue bonds on an "as required" basis. Debt service on outstanding debt is paid from water revenues. Bond covenants stipulate that the District must maintain a 1.25 debt coverage ratio on all parity bonds. The long-term financial analysis targets a debt coverage ratio of 2.0, which helps establish the parameters for capital planning that ensure bond covenants will be met.

The District currently enjoys credit ratings that are among the highest for a water-related governmental entity in the state of California, which helps keep interest costs borne by the District at a minimum.

Relationship between the Operating Budget and CIP

Whenever the District commits to capital improvements, there is a potential for associated long-range commitment of operating funds. For example, if 20-year bonds are issued to finance capital needs, then the operating funds will need to budget debt service payments for the next two decades. For this reason, it is important to evaluate capital commitments in the context of their long-range operating impact.

In addition to the long-range debt service payments, some capital projects affect future operating budgets either positively or negatively due to an increase or decrease in maintenance and operation costs. Such impacts vary widely from project to project and, are evaluated individually during the project development stage. The District is committing to a potential change in the operating budget when a capital project is approved.

The projected debt service payments and the positive or negative operating budget impacts are important factors considered in the District's financial analysis.

This chart identifies the operating budget impacts to each fund from projected debt service payments. The debt service payment in the Watershed Stream Stewardship Fund is a total of payments associated with each individual watershed.

Debt Payment Schedule ($K)

Fund	FY17	FY18	FY19	FY20	FY21
General Fund	538	538	538	539	539
Benefit Assessment Fund	12,168	12,162	12,162	11,085	11,094
Safe, Clean Water and Natural Flood Protection Fund	212	7,539	7,539	7,539	7,539
Water Utility Enterprise Fund	27,309	42,597	65,164	90,115	110,424
Information Technology Fund	-	-	-	-	-
TOTAL	40,227	62,835	85,403	109,278	129,595

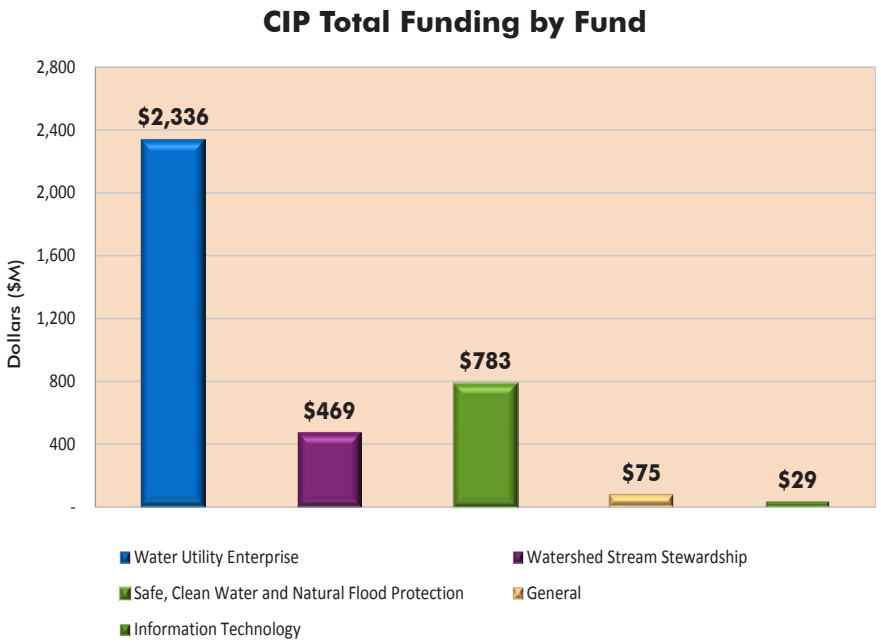
This chart identifies the net operating budget impacts to each fund resulting from annual maintenance and/or operating cost for newly completed capital projects. Additional information regarding operating impacts related to individual projects can be found on the project pages.

Estimated Operating Impacts ($K)

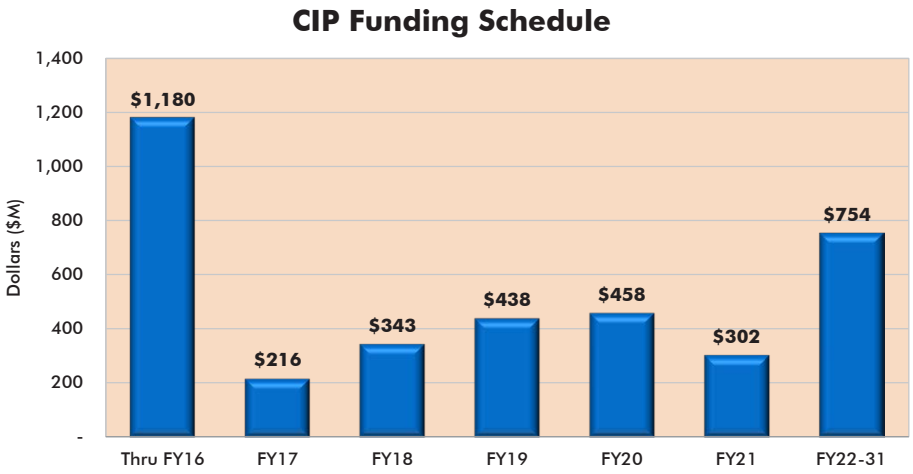
Fund	FY17	FY18	FY19	FY20	FY21	BEYOND
General Fund	-	-	-	-	-	-
Watershed Stream Stewardship Fund	65	65	100	4,100	100	100
Safe, Clean Water and Natural Flood Protection Fund	-	-	-	50	150	730
Water Utility Enterprise Fund	-	2,550	2,575	2,583	2,653	4,168
Information Technology Fund	-	-	164	169	174	179
TOTAL	65	2,615	2,839	6,902	3,077	5,177

CIP FUNDING SUMMARY

Of the $3.692 billion in total District funding for current and future projects, the Board appropriated $1.180 billion in prior years through June 30, 2016 (the end of Fiscal Year 2015-16). This year's CIP process identified additional funding needs of $2.512 billion to complete the projects in the CIP, with $216 million allocated in Fiscal Year 2016-17 and a total of $2.296 billion proposed for future years.



The needed $3.692 billion to implement the 65 projects as defined in the CIP are funded by four of the District's seven Funds.



The following chart shows the funding schedule for the $3.692 billion to implement the 65 projects.

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
Almaden Dam Improvements	7,360	2,712	-	2,482	17,716	10,917	9,799	5,532	-	56,518
Anderson Dam Seismic Retrofit (C1)	30,230	1,006	1,804	-	54,430	66,699	48,593	-	-	200,958
Calero and Guadalupe Dams Seismic Retrofits	9,567	7,966	2,182	9,267	15,889	57,150	27,036	22,818	6,040	155,733
Coyote Pumping Plant ASD Replacement	-	-	-	-	-	562	1,954	9,586	5,029	17,131
Coyote Pumping Plant Warehouse	416	2,597	2,106	121	-	-	-	-	-	3,134
Dam Seismic Stability Evaluation	18,812	-	1,821	-	-	-	485	487	-	19,784
Small Capital Improvements, San Felipe Reach 1-3	n/a	1,628	-	3,608	706	1,226	-	756	25,998	33,922
5-Year Pipeline Rehabilitation	14,362	9,481	885	9,208	-	-	-	-	-	33,051
10-Year Pipeline Rehabilitation (FY18-FY27)	-	-	-	-	16,444	20,762	11,818	4,637	46,483	100,144
FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
Pacheco/Santa Clara Conduit Right of Way Acquisition	1,142	8	-	1,470	328	106	-	-	-	3,054
Penitencia Delivery Main/Force Main Seismic Retrofit	4,067	17,773	3,439	9,172	103	-	-	-	-	31,115
SCADA Remote Architecture & Communications Upgrade	370	32	-	374	389	619	819	852	3,477	6,932
Small Capital Improvements, Raw Water Transmission	n/a	38	-	-	115	-	53	-	3,438	3,644
Small Capital Improvements, Treated Water Transmission	n/a	-	-	-	61	84	-	-	-	145
Vasona Pumping Plant Upgrade	-	-	-	119	1,321	1,789	17,673	85	-	20,987
Fluoridation at WTPs	1,148	5,338	3	3,009	-	-	-	-	-	9,495
IRP2 WTP Ops Bldgs Seismic Retrofit	19,686	1,306	684	798	76	-	-	-	-	21,866
PWTP Clearwell Recoating & Repair	4,516	1,403	2,593	550	119	-	-	-	-	6,588
PWTP Residuals Management	-	-	-	-	703	1,462	7,835	-	-	10,000
RWTP FRP Residuals Management Modifications	26,022	286	-	118	-	-	-	-	-	26,426
RWTP Reliability Improvement	26,507	45,009	-	44,712	44,496	44,811	46,345	146	-	252,026
RWTP Treated Water Valves Upgrade	8,075	296	18	55	-	-	-	-	-	8,426
Small Capital Improvements, Water Treatment	n/a	3,509	-	2,831	782	5,465	3,562	3,492	41,770	61,411
PureWater Silicon Valley (PWSV)	2,000	18,499	1,030	9,669	28,629	129,802	208,623	191,600	355,904	944,726
Silicon Valley Advanced Water Purification Center	75,928	838	86	49	-	-	-	-	-	76,815
South County Recycled Water Pipeline	17,195	10,589	10,326	15,772	183	79	361	-	-	44,179
Wolfe Road Recycled Water Pipeline	10,608	6,563	470	657	-	-	-	-	-	17,828

FY 2015-16 Funds to be reappropriated

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K) (cont'd)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
FAHCE Stevens Creek Fish Passage Enhancement - 90%	765	-	-	-	1,355	2,903	-	-	-	5,024
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
WTP-WQL Network Equipment	473	267	12	180	757	407	166	-	6,738	8,988
TOTAL	279,249	137,144	27,459	114,221	190,065	349,971	400,588	255,483	609,372	2,336,093

FY 2015-16 Funds to be reappropriated

Project Funding Schedule for Watershed and Stream Stewardship Fund ($K)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
Palo Alto Flood Basin Tide Gate Structure Improvements	816	384	858	-	4,340	6	-	-	-	5,546
Permanente Creek, SF Bay to Foothill Expressway	17,541	-	178	-	-	-	-	-	-	17,541
San Francisquito Creek, SF Bay thru Searsville Dam	4,064	-	-	-	-	-	-	-	-	4,064
San Francisquito Creek, Early Implementation	1,614	-	-	-	-	-	-	-	-	1,614
San Tomas Creek, Quito Road Bridge Replacement	292	271	-	-	129	-	-	-	-	692
Canoas Creek, Rodent Damage Repair	300	5,320	-	388	446	-	-	-	-	6,454
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	55,191	31,530	26,474	27,176	1,268	251	309	161	-	115,886
Cunningham Flood Detention Certification	4,458	-	1,183	3,829	2,216	675	129	-	-	11,307
Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	4,807	1,993	-	2,891	14,503	6,829	351	365	400	32,139
Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	95,304	1,484	3,440	710	276	56	11	-	-	97,841
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps	8,970	-	13	-	-	-	-	-	-	8,970
Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs	8,544	-	2,160	-	-	-	-	-	-	8,544
Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	7,046	-	3,749	-	2,335	2,410	-	-	-	11,791
Llagas Creek–Upper, R5,6,&7b	-	-	-	-	-	17,000	6,000	-	-	23,000
Erosion Repair Program (ERP)	-	-	-	4,251	4,000	-	2,000	11,000	49,000	70,251
San Francisco Bay Shoreline	12,525	1,542	1,500	-	-	-	-	-	-	14,067
San Francisco Bay Shoreline - Contribution	490	-	-	-	-	-	-	-	-	490
Shoreline Early Implementation	359	-	-	-	-	-	-	-	-	359
Small Capital Improvements - Regnart Creek	528	2,200	323	787	-	-	-	-	-	3,515
FAHCE Stevens Creek Fish Passage Enhancement - 10%	85	-	-	-	151	323	-	-	-	558
Salt Ponds A5-11 Restoration	-	1,565	-	1,715	784	1,898	-	-	-	5,962
SMP Mitigation, Stream and Watershed Land Preservation	14,204	1,510	-	510	860	-	-	-	-	17,084
SCW Implementation Fund	-	-	-	-	724	749	775	802	7,886	10,936
TOTAL	237,138	47,799	39,878	42,257	32,032	30,197	9,575	12,328	57,286	468,611

FY 2015-16 Funds to be reappropriated

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund ($K)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
IRP2 Additional Line Valves (A3)	-	-	-	-	-	-	-	-	13,918	13,918
Main & Madrone Pipelines Restoration (A1)	630	1,178	-	520	13,488	281	-	-	-	16,097
Permanente Creek, SF Bay to Foothill Expressway	45,028	-	289	11,722	6,564	112	-	-	-	63,426
San Francisquito Creek, SF Bay thru Searsville Dam (E5)	6,684	98	635	-	-	-	-	-	-	6,782
San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)	25,634	7,348	-	536	13,770	-	-	-	-	47,288
Sunnyvale East and West Channels	37,878	8,299	31,960	-	23,217	56	-	-	-	69,450
Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	112,579	302	11,776	8,615	25,613	10,115	12,024	8,522	6,764	184,534
Berryessa Creek, Calaveras Boulevard to Interstate 680	28,839	4,003	-	14,747	1,500	940	825	-	-	50,854
Coyote Creek, Montague Expressway to Interstate 280	30,486	-	17,643	-	-	-	831	821	747	32,885
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)	-	385	-	-	5,023	6,134	6,379	16,175	17,142	51,238
Llagas Creek–Upper, Reimbursable (E6b)	41,670	962	24,701	-	-	-	-	-	-	42,632
Llagas Creek–Upper, Corps Coordination (E6a)	18,509	50,384	66,775	-	5,860	8,000	125	-	-	82,878
Llagas Creek–Upper, Technical Studies	1,446	-	-	-	-	-	-	-	-	1,446
Llagas Creek–Upper, Design	18,855	1,688	-	1,071	-	-	-	-	-	21,614
San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)	6,239	309	100	6,246	4,447	4,384	4,520	-	-	26,145
San Francisco Bay Shoreline - Other EIAs Planning (E7)	1,639	1,695	618	422	3,028	3,150	3,276	-	-	13,210
Almaden Lake Improvements (D4.1a)	1,960	940	235	1,044	-	-	-	-	-	3,944
Hale Creek Enhancement Pilot Study (D6)	-	462	-	482	1,627	-	-	-	-	2,571
SCW Fish Passage Improvements (D4.3; Bolsa Road)	-	1,571	-	2,203	1,472	1,410	-	-	-	6,656
South Bay Salt Ponds Restoration (D8)	517	18	326	-	1,712	1,863	-	-	-	4,110
SCW Implementation Fund, Comer Debris Basin (D6.2)	-	-	-	-	290	1,184	218	-	-	1,692
SCW Implementation Fund, Creek Bank Stability (D6.1)	-	-	-	-	4,277	4,540	6,210	-	-	15,027
SCW Implementation Fund, Ogier Ponds Separation from Coyote Creek (D4.1b)	-	-	-	-	2,518	8,560	2,307	-	-	13,385
SCW Impelementation Fund, Regionally Significant Habitat Land Acquisition (D7)	-	-	-	-	724	749	775	802	7,886	10,936
TOTAL	378,593	79,642	155,058	47,608	115,130	51,478	37,490	26,320	46,457	782,718

FY 2015-16 Funds to be reappropriated

Project Funding Schedule for General Fund ($K)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
Almaden and Winfield Campus, Small Capital Improvements	n/a	1,880	-	2,062	2,126	2,192	2,260	2,324	27,526	40,370
Headquarters Operations Building	219	957	1,060	-	987	3,825	6,949	4,867	-	17,804
Winfield Capital Improvements	1,685	7,618	7,474	5,927	622	-	-	-	-	15,852
PeopleSoft System Upgrade & Expansion	1,199	-	-	-	-	-	-	-	-	1,199
TOTAL	3,103	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	75,225

FY 2015-16 Funds to be reappropriated

Project Funding Schedule for Information Technology Fund ($K)

PROJECT NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
Data Consolidation	-	336	-	325	271	281	-	-	-	1,213
IT Disaster Recovery	208	354	-	1,393	457	-	-	-	-	2,412
PeopleSoft System Upgrade & Expansion	4,463	-	1,749	2,415	765	-	-	-	-	7,643
Software Upgrades & Enhancements	-	1,224	234	9	422	405	880	1,004	13,698	17,642
TOTAL	4,671	1,914	1,983	4,142	1,915	686	880	1,004	13,698	28,910

FY 2015-16 Funds to be reappropriated

CIP Funding Schedule Summary for All Funds ($K)

FUND NAME	Through FY15	FY16	FY16 Unspent	FY17	FY18	FY19	FY20	FY21	FY22-31	TOTAL
Water Utility Enterprise	279,249	137,144	27,459	114,221	190,065	349,971	400,588	255,483	609,372	2,336,093
Watershed Stream Stewardship	237,138	47,799	39,878	42,257	32,032	30,197	9,575	12,328	57,286	468,611
Safe, Clean Water and Natural Flood Protection	378,593	79,642	155,058	47,608	115,130	51,478	37,490	26,320	46,457	782,718
General	3,103	10,455	8,534	7,989	3,735	6,017	9,209	7,191	27,526	75,225
Information Technology	4,671	1,914	1,983	4,142	1,915	686	880	1,004	13,698	28,910
TOTAL	902,754	276,954	232,912	216,217	342,877	438,349	457,742	302,325	754,339	3,691,557

FY 2015-16 Funds to be reappropriated

WATER SUPPLY CAPITAL PROJECTS

Priority Ranking Criteria

NORMALIZED PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (75%)

Water Supply (E 2) 0

	I	P	
A	☐	☐	Project maintains existing water utility infrastructure or is required to meet the current and future water supply demand, comply with water quality standards or meet other regulatory requirements. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project increases water supply portfolio, increases operation flexibility, improves maintenance capabilities, adds efficiency, or improves post-disaster reliability of water utility infrastructure [Example: improving the systematic reliability of water utility infrastructure to continually perform during and after a devastating event; improving the systematic flexibility of water utility infrastructure to utilize various source water; or adding redundancy so infrastructure can be taken off-line for maintenance]. **(H, M, L)**
C	☐		Timing of when project is needed to meet water supply demands, water quality standards, or other regulations. **(I = Immediately (0-3 yrs.); S = Short-term (3-5 yrs.); L = Long-term (5+ yrs.))**

COMMUNITY ENGAGEMENT (7.5%)

Social Factor - Check if applicable 0

☐ Promotes Emergency Recovery

Positive Interaction (E 4) - Check all that apply

☐ With the Community

☐ With other agencies

ENVIRONMENTAL SUSTAINABILITY (7.5%)

Water Quality (E 3.2) - Check if applicable 0

☐ Promotes drinking water quality

Natural Resources Sustainability (E 3.2) - Check all that apply

☐ Promotes water use efficiency

☐ Promotes energy efficiency or incorporates energy efficient features

☐ Promotes stream management

COST RECOVERY (10%)

Lifecycle costs are minimized - Check One 0

☐ Annual cost savings of more than $500,000

☐ Annual cost savings of $200,000 to $500,000

☐ Annual cost savings of less than $200,000 (reference ½ PY)

Funding Available from Other Agencies - Check One

☐ Over 50% of project costs available from other agencies

☐ 26% to 50% of project costs available from other agencies

☐ Up to 25% of project costs available from other agencies

FLOOD PROTECTION PROJECTS

Priority Ranking Criteria

PRIORITY SCORE = 0

Project Name Here

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)

Flood Protection (E 3) — 0

I P

☐ ☐ Project restores existing watershed infrastructure to its intended level of flood protection.
I = Impact (H, M, L); P = Probability (H, M, L)

☐ Project is a Board or USACE priority, improves watershed infrastructure to achieve the committed level of flood protection, or provides flood protection beyond the level of commitment. **(H, M, L)**

☐ Timing of when the flood protection benefit will be realized by the community.
I = Immediate (0-3 years); S = Short-term (3-5 years); L - Long-term (more than 5 years)

COMMUNITY ENGAGEMENT (10%)

Positive Interaction (E 4) - Check all that apply — 0

☐ With the Community ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

☐ Graffiti removal or Prevention Features

☐ Trash removal features (vortex weirs)

☐ Improves aesthetics of project location

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.1, 4.1) — 0

☐ Project incorporates at least one of the following: removal of fish barrier; structural improvements to fish habitat; inclusion of riparian habitat (planting, setback or protect in place); inclusion of SRA plantings and/or features designed to improve water temperature; improvements to facilitate habitat connectivity, upland habitat and/or wetland habitat protection or preservation; or reduction of hardscape elements.

Physical Function (E 3.2)

☐ Project incorporates at least one of the following: a holistic watershed approach; geomorphic design elements; erosion control (sediment source reduction); floodplain connectivity; or protection from sea level rise.

Water Quality and Supply (E 3.2)

☐ Project incorporates TMDL improvements or provides opportunity for recharge

Trails & Open Space (E4.2, E4.3) - Check all that apply

☐ Project incorporates trail friendly features, provides protection or preservation of open space, or provides/improves Bicycle Commute Route

COST RECOVERY (15%)

Funding Available from Other Agencies - Check One — 0

% C

☐ ☐ 50% or more of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ 26% to 49% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

☐ ☐ Up to 25% of project costs available from other agencies
% = Percentage of cost provided; C = Confidence Level (H, M, L)

WATER RESOURCES STEWARDSHIP PROJECTS

Priority Ranking Criteria

PRIORITY SCORE = **0**

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (55%)

Stewardship Projects 0

	I	P	
A	☐	☐	Project restores a previously constructed environmental enhancement so that it can continue to provide the benefits for which it was created or project meets a permit condition/requirement. **I = Impact (H, M, L); P = Probability (H, M, L)**
B	☐		Project creates Stewardship features to achieve stewardship commitments. **(H, M, L)**
C	☐		Stewardship activities beyond the current commitment. **(H, M, L)**

COMMUNITY ENGAGEMENT (15%)

Positive Interaction (E 4) - Check all that apply 0

- ☐ With the Community
- ☐ With other agencies

Good Neighbor (E 4) - Check all that apply

- ☐ Graffiti removal or Prevention Features
- ☐ Trash removal features (vortex weirs)
- ☐ Improves aesthetics of project location

Education Element

- ☐ Promotes water conservation
- ☐ Promotes stream stewardship
- ☐ Promotes flood protection
- ☐ Promotes Bay protection

ENVIRONMENTAL SUSTAINABLITY (15%)

Ecological Function (E 3.2) - Check all that apply 0

- ☐ Fish Barrier Removal / Structural or nonstructural improvement to fish habitat
- ☐ Riparian Habitat (planting, setback or protect in place)
- ☐ SRA Plantings or Improved water temperature
- ☐ Upland Habitat Protection/Preservation
- ☐ Wetland Habitat Protection/Preservation
- ☐ Hardscape Reduction

Physical Stream Function (E 3.2) - Check all that apply

- ☐ Holistic Watershed Approach
- ☐ Geomorphologic Design Elements
- ☐ Erosion Control or Sediment Source Reduction

Water Quality (E 3.2) - Check all that apply

- ☐ Storm Water Treatment (pervious pavement, green roofs, etc.)
- ☐ TMDL Improvements
- ☐ Hazardous Material Removal (Asbestos, Lead, Hydrocarbons, etc.)

Trails & Open Space (E3.3) - Check all that apply

- ☐ Trail friendly features
- ☐ Provides/Improves Bicycle Commute Route
- ☐ Open Space Protection / Preservation
- ☐ Climate change elements

COST RECOVERY (15%)

Funding Available from Other Agencies - Check One 0

%	C	
☐	☐	Over 50% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**
☐	☐	26% to 50% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**
☐	☐	Up to 25% of project costs available from other agencies **% = Percentage of cost provided; C = Confidence Level (H, M, L)**

BUILDINGS & GROUNDS PROJECTS

Priority Ranking Criteria

PRIORITY SCORE = 0

Project Name

RAW SCORE = 0

PRIMARY OBJECTIVE (60%)	**Buildings and Grounds (EL 3.4)**	Impact = ; Probability =	0.00
	A ☐ Project maintains or replaces existing building infrastructure to provide continuous housing of existing functions and/or to comply with employer safety standards.		
	B ☐ Project enhances building infrastructure to address treatment of staff issues.		
	C ☐ Project positions the District to meet projected future space needs.		
COMMUNITY ENGAGEMENT (10%)	**Positive Interaction (E 4)** - Check all that apply		0.00
	☐ With the Community	☐ With other agencies	
	Good Neighbor (E 4) - Check all that apply		
	☐ Graffiti removal or Prevention Features		
	☐ Trash removal features (vortex weirs)		
	☐ Improves esthetics of project location		
ENVIRONMENTAL SUSTAINABILITY (15%)	**Natural Resources Sustainability (E 3.2)** - Check all that apply		0.00
	☐ Air Quality & Visibility Improvement	☐ Recycled Water, rain water or gray water utilized	
	☐ Energy Efficient Features (Lighting, HVAC, maximize daylight use, etc.)	☐ Construction Site Waste Management	
		☐ Recycle/Re-use Solid Waste	
	☐ Renewable Energy Use	☐ Reduce Solid Waste Production	
	☐ Water Efficient Features: Plumbing fixtures, Landscaping, etc.	☐ Use of Recycled or Alternative Building Materials	
	Trails & Open Space (E3.3) - Check all that apply		
	☐ Trail friendly features	☐ Open Space Protection / Preservation	
	☐ Provides/Improves Bicycle Commute Route		
COST RECOVERY (15%)	**Funding Available from Other Agencies (Grants & Cost-share) - Check One**		0.00
	☐ Over 50% of project costs available from other agencies		
	☐ 26% to 50% of project costs available from other agencies		
	☐ Up to 25% of project costs available from other agencies		

INFORMATION TECHNOLOGY PROJECTS

Priority Ranking Criteria

PRIORITY SCORE = 0

Project Name

SCORE = 0

PRIMARY OBJECTIVE (90%)	**Information Technology (EL 7.5)**	Impact = ; Probability =	0.00
	A ☐ Project maintains existing mission critical software systems and/or IT infrastructure to improve reliability for business continuity. **(H+, H-, M+, M-, L)**		
	B ☐ Project enhances mission critical software systems and/or IT infrastructure to improve user functionality. **(H, M, L)**		
	C ☐ Project enhances mission critical software systems and/or IT infrastructure to meet projected future needs. **(H, M, L)**		
	D ☐ Ties into IT master Plan finding and/or recommendations (10 pts.)		
COST RECOVERY (10%)	**Funding Available from Other Agencies** - Check One		0.00
	☐ Over 50% of project costs available from other agencies		
	☐ 26% to 50% of project costs available from other agencies		
	☐ Up to 25% of project costs available from other agencies		

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Appendix B - Project List By Priority

Water Supply Capital Projects in Order of Priority

FUNDED

FY17 Priority	Name	Total Project Value ($K)	Remaining Funding ($K) (FY-17 to Completion)	Phase
100	Anderson Dam Seismic Retrofit	$200,958	$171,526	Des
100	Dam Safety Program Seismic Stability	$19,783	$2,792	Pln
94	Calero and Guadalupe Dams Seismic Retrofits	$154,116	$138,765	Pln/Des
91	RWTP Reliability Improvement	$252,026	$180,510	Const
87	RWTP FRP Residuals Management Modifications	$26,426	$118	Const/CO
87	RWTP Treated Water Valves Upgrade	$8,426	$73	Const/CO
84	Penitencia Delivery Main/Force Main Seismic Retrofit	$31,099	$12,698	Const
81	PureWater Silicon Valley	$944,726	$925,257	Pln/Des
79	10-Year Pipeline Rehabilitation	$100,144	$100,144	Pln/Des
78	Small Capital Improvements, San Felipe Reach 1-3	$33,921	$32,294	Continuing
77	Pacheco/Santa Clara Conduit Right of Way Acquisition	$3,054	$1,904	Const
76	5-Year Pipeline Rehabilitation	$33,029	$10,071	Pln/Des/Const
75	SCADA Remote Architecture & Communications Upgrade	$6,932	$6,530	Pln/Des
73	Small Capital Improvements, Raw Water Transmission	$3,644	$3,606	Continuing
73	Small Capital Improvements, Water Treatment	$61,411	$57,902	Continuing
73	Small Capital Improvements, Treated Water Transmission	$145	$145	Continuing
73	FAHCE Implementation	$145,108	$145,108	Pln
71	Coyote Pumping Plant ASD Replacement	$17,131	$17,131	FY19
70	Main & Madrone Pipelines Restoration	$16,097	$14,289	Des
70	IRP2 WTP Ops Bldgs Seismic Retrofit	$21,866	$1,558	Const/CO
68	Vasona Pumping Plant Upgrade	$20,987	$20,987	Pln/Des
68	PWTP Clearwell Recoating & Repair	$6,453	$3,127	Const/CO
63	IRP2 Additional Line Valves	$13,918	$13,918	FY25
57	PWTP Residuals Management	$10,000	$10,000	FY18
51	Fluoridation at WTPs	$9,495	$3,012	Const
51	Almaden Dam Improvements	$56,518	$46,446	Des
50	Coyote Pumping Plant Warehouse	$3,134	$2,227	Des/Const
39	Wolfe Road Recycled Water Pipeline	$17,828	$1,127	Const/CO
17	Silicon Valley Advanced Water Purification Center	$76,815	$135	Const/CO
17	South County Recycled Water Pipeline	$44,178	$26,720	Des/Const
LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS				
74	Dam Seismic Retrofit at 2 Dams (Chesbro & Uvas)	$89,500	$89,500	N/A
66	SCADA Small Capital Improvements	$29,612	$29,612	N/A
30	Alamitos Diversion Dam Improvements	$3,183	$2,345	On Hold
30	Coyote Diversion Dam Improvements	$2,461	$2,138	On Hold
26	Land Rights - South County Recycled Water PL	$5,816	$5,816	N/A

Appendix B - Project List By Priority

Flood Protection Capital Projects in Order of Priority

FUNDED

FY17 Priority	Name	Total Project Value ($K)	Remaining Funding ($K) (FY-17 to Completion)	Phase
95	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	$97,681	$4,333	Const
87	San Francisco Bay Shoreline (E7)	$54,271	$31,691	Des
85	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	$59,727	$14,920	Pln/Des/Const
82	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	$184,534	$83,429	Des/Const
78	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	$11,791	$8,494	Pln/Des/Const
78	Cunningham Flood Detention Certification	$11,307	$8,032	Des/Const
78	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	$32,139	$25,339	Des/Const
77	Upper Penitencia Creek, Coyote Creek to Dorel Drive	$68,638	$52,912	Pln/Des
76	Permanente Creek, SF Bay to Foothill Expressway	$80,789	$18,687	Const
76	San Tomas Creek, Quito Road Bridge Replacement	$692	$129	Des/Const
75	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	$171,569	$129,531	Const
75	Berryessa Creek, Calaveras Boulevard to Interstate 680	$50,854	$18,012	Des/Const
72	Coyote Creek, Montague Expressway to Interstate 280	$32,884	$20,041	Des
68	Sunnyvale East and West Channels	$69,450	$55,233	Const
67	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	$115,886	$55,639	Des/Const
67	Erosion Repair Program	$70,251	$70,251	Pln/Des/Const
63	Small Capital Improvements - Regnart Creek	$3,515	$1,110	Const
51	Canoas Creek, Rodent Damage Repair	$6,454	$834	Const/CO
48	Palo Alto Flood Basin Tide Gate Structure Improvements	$5,547	$5,205	Des

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

87	SF Bay Shoreline Other EIAs Planning	$35,000	$35,000	N/A
76	Permanente Creek, Hale Creek Construction	$16,525	$16,525	N/A
67	Erosion Repair Program - Unfunded Work	$99,302	$99,302	N/A

Appendix B - Project List By Priority

Water Resources Stewardship Capital Projects in Order of Priority

FUNDED

FY17 Priority	Name	Total Project Value ($K)	Remaining Funding ($K) (FY-17 to Completion)	Phase
	Mitigation			
	(All Mitigation projects are required per CEQA or other Regulation and therefore do not receive a score)			
	SMP Mitigation, Stream and Watershed Land Preservation	$17,084	$1,370	Continuing
	Environmental Commitment			
	None			
	Environmental Enhancement			
55	Hale Creek Enhancement Pilot Study	$2,571	$2,109	Des
46	SCW Fish Passage Improvements	$6,656	$5,085	Pln/Des/Const
40	FAHCE Stevens Creek Fish Passage Enhancement	$5,582	$4,732	On Hold
39	Almaden Lake Improvements	$3,944	$1,279	Des
36	Salt Ponds A5-11 Restoration	$5,962	$4,397	Pln/Des/Const
30	South Bay Salt Ponds Restoration	$4,110	$3,901	Pln
	Stewardship			
38	SCW Implementation Fund	$62,911	$62,911	Pln

LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS

66	Permanente Creek Riparian Channel Restoration	$5,989	$5,989	N/A
39	Almaden Lake Improvements - Construction	$17,585	$17,585	N/A

Appendix B - Project List By Priority

Buildings and Grounds Capital Projects in Order of Priority

FUNDED

FY17 Priority	Name	Total Project Value ($K)	Remaining Funding ($K) (FY-17 to Completion)	Phase
73	Almaden and Winfield Campus, Small Capital Improvements	$40,370	$38,490	Continuing
70	Winfield Capital Improvements	$15,852	$14,023	Const
65	Headquarters Operations Building	$17,804	$17,688	Pln/Des
LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS				
70	Fleet and Facility Annex Improvements	$4,719	$4,719	N/A

Information Technology Capital Projects in Order of Priority

FUNDED

FY17 Priority	Name	Total Project Value ($K)	Remaining Funding ($K) (FY-17 to Completion)	Phase
70	PeopleSoft System Upgrade & Expansion	$8,842	$4,929	Const
55	Software Upgrades & Enhancements	$17,642	$16,652	Const
54	IT Disaster Recovery	$2,412	$1,850	Const
54	WTP-WQL Network Equipment	$8,988	$8,260	Const
40	Data Consolidation	$1,213	$877	Const
LOWER PRIORITY OR UNFUNDED FUTURE PROJECTS				
	Telecommunications Modernization	$1,261	$1,261	N/A

Appendix C - District Partnership Summary

Partnership Reimbursements are funds that are reimbursed by the District's partners after the District advances the needed funds. The following table identifies capital projects that are funded cooperatively with the District's partners through reimbursements.

Partnership Reimbursement

Reimbursements for Current Projects ($K)		Actuals																	
Project Number	Project Name / Agency	Thru FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	Total
91864005	Anderson Dam Seismic Retrofit (C1)	0	0	0	0	0	4,090	0	0	0	0	0	0	0	0	0	0	0	4,090
	DWR - Prop 84						4,090												4,090
91C40377	Coyote Pumping Plant ASD Replacement Total	0	0	0	0	0	0	124	430	2,109	1,106	0	0	0	0	0	0	0	3,769
	San Benito Water Dist	0						124	430	2,109	1,106								3,769
91214010	Small Capital Improvements, San Felipe - Rch 1 Total	835	4	311	330	110	172	0	0	17	0	242	88	66	407	110	116	0	2,808
	San Benito Water Dist	835	4	311	330	110	172	0	0	17	0	242	88	66	407	110	116	0	2,808
91C40387	Pacheco Conduit Inspection & Rehabilitation Total	0	0	0	325	1,195	0	0	0	0	0	0	0	0	0	0	0	0	1,520
	San Benito Water Dist	0			325	1,195													1,520
92144001	Pacheco/Santa Clara Conduit ROW Acquisition Total	17	0	0	8	87	19	6	0	0	0	0	0	0	0	0	0	0	138
	San Benito Water Dist	17			8	87	19	6											138
92374005	SCADA Remote Architecture & Comm. Upg Total	0	0	0	82	82	86	136	180	187	195	203	211	157	0	0	0	0	1,519
	San Benito Water Dist	0	0	0	82	82	86	136	180	187	195	203	211	157					1,519
93084011	Fluoridation at WTPs Total	110	2,290	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,400
	The Health Trust	110	890																1,000
	First 5 of Santa Clara County	0	900																900
	California Dental Association Foundation	0	500																500
93764003	IRP2 WTP Ops Bldg Seismic Retrofit Total	415	289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	704
	FEMA Grant (California Office of Environmental Services)	415	289																704
91184008	Silicon Valley Advanced Water Purification Ctr Total	22,046	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,169
	City of San Jose	8,500																	8,500
	DWR - Prop 50	2,935																	2,935
	DWR - Prop 84	2,486	123																2,609
	USBR - ARRA	8,125																	8,125
91094007s	South County Recycled Water Pipeline Total	2,106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,106
	SCRWA	811																	811
	USBR - ARRA	1,295																	1,295
91244001	Wolfe Road Recycled Water Pipeline Total	765	7,635	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,900
	Apple Computer	0	4,800																4,800
	Cal Water	150	1,350																1,500
	City of Sunnyvale	615	1,485																2,100
	DWR - Prop 84	0		2,500															2,500
26284001	San Francisquito Creek, SF Bay - Searsville Dam Total	0	4,000	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,000
	San Francisquito Joint Powers Authority (DWR)	0	4,000	4,000															8,000
26154001s	Guadalupe River–Upper, I-280 - Blossom Hill Rd Total	16,577	0	7,982	4,500	5,800	7,700	2,000	0	0	0	0	0	0	0	0	0	0	44,559
	State Subventions	12,792	0	7,982	4,500	5,800	7,700	2,000											40,774
	City of San Jose	3,785																	3,785
26174041s	Berryessa Ck, Calaveras Bvd to I-680 Total	0	2,000	2,236	8,890	3,558	0	0	0	0	0	0	0	0	0	0	0	0	16,684
	State Subventions	0		236	2,890	3,558													6,684
	DWR - Prop 1E	0	2,000	2,000	6,000														10,000
40174004	Berryessa Ck, Lwr Penitencia Ck - Calaveras Bvd Total	0	3,000	6,000	6,000	0	0	0	0	0	0	0	0	0	0	0	0	0	15,000
	DWR - Prop 1E	0	3,000	6,000	6,000														15,000
40264011	Cunningham Flood Detention Certification Total	0	0	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000
	DWR - Prop 1E	0			1,000														1,000
40334005	Lwr Penitencia Ck Imp, Berryessa to Coyote Cks. Total	0	0	1,000	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000
	DWR - Prop 1E	0		1,000	4,000														5,000
40264008s	Lwr Silver Ck, I-680 to Cunningham, Rchs 4-6 Total	26,940	8,000	13,258	4,000	865	0	0	0	0	0	0	0	0	0	0	0	0	53,063
	State Subventions	6,264	0	1,258	0	865													8,387
	DWR - Prop 1E	0	8,000	12,000	4,000														24,000
	NRCS-ARRA	20,676																	20,676
50284010	Llagas Ck–Lwr, Capacity Restoration Total	120	0	5,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120
	State Subventions	120		5,000															5,120
26174051s	Llagas Creek–Upr, Buena Vista to Wright Total	9,430	1,369	4,984	2,669	22,230	0	0	0	0	0	0	0	0	0	0	0	0	40,682
	State Subventions	6,089	1,369	4,984	2,669	22,230													37,341
	City of Morgan Hill	3,341																	3,341
26444002	San Francisco Bay Shoreline (EIA 1-10a) Total	0	420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420
	State Bond - DWR	0	420																420
	SUBTOTAL - Reimbursements from Current Projects	79,361	29,130	47,271	31,804	33,928	7,977	2,266	610	2,313	1,301	445	299	223	407	110	116	0	241,651

Partnership Reimbursement (cont'd)

Pending Reimbursements for Closed Projects	Actuals																	
Project Number Project Name Agency	Thru FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	Total
30154013s Guadalupe River–DT, I-880 to I-280 Total	39,480	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39,590
State Subventions	27,618		110															27,728
City of San Jose	1,654																	1,654
San Jose Redev Agency	10,208																	10,208
SUBTOTAL - Reimbursements for Closed Projects	39,480	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39,590
TOTAL REIMBURSEMENTS	118,841	29,130	47,381	31,804	33,928	7,977	2,266	610	2,313	1,301	445	299	223	407	110	116	0	281,241

Appendix C - District Partnership Summary

Partnership Funding is funds that are made available by the District's partners, when needed. The following table identifies capital projects that receive partnership funding. This may occur through either cost sharing agreements or as in-kind services.

Partnership Funding

Project Number	Project Name	Amount ($K)	Partnering Agency
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	13,600	U.S. Army Corps of Engineers
26154001s	Guadalupe River–Upper, Interstate 280 to Blossom Hill Road	188,000	U.S. Army Corps of Engineers
26174051s	Llagas Creek–Upper, Buena Vista Road to Wright Avenue	65,000	U.S. Army Corps of Engineers
00044026s	San Francisco Bay Shoreline	91,250	USACE, Coastal Conservancy, US Fish & Wildlife, CA Wildlife Conservation, Packard-Hewlett-Goldman-Moore Foundations
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	3,000	U.S. Army Corps of Engineers
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	1,500	County of San Mateo
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	City of Saratoga
20194005	San Tomas Creek, Quito Road Bridge Replacement	300	Town of Los Gatos
20194005	San Tomas Creek, Quito Road Bridge Replacement	4,115	CALTRANS
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	102,720	U.S. Army Corps of Engineers
	TOTAL	$ 469,785	

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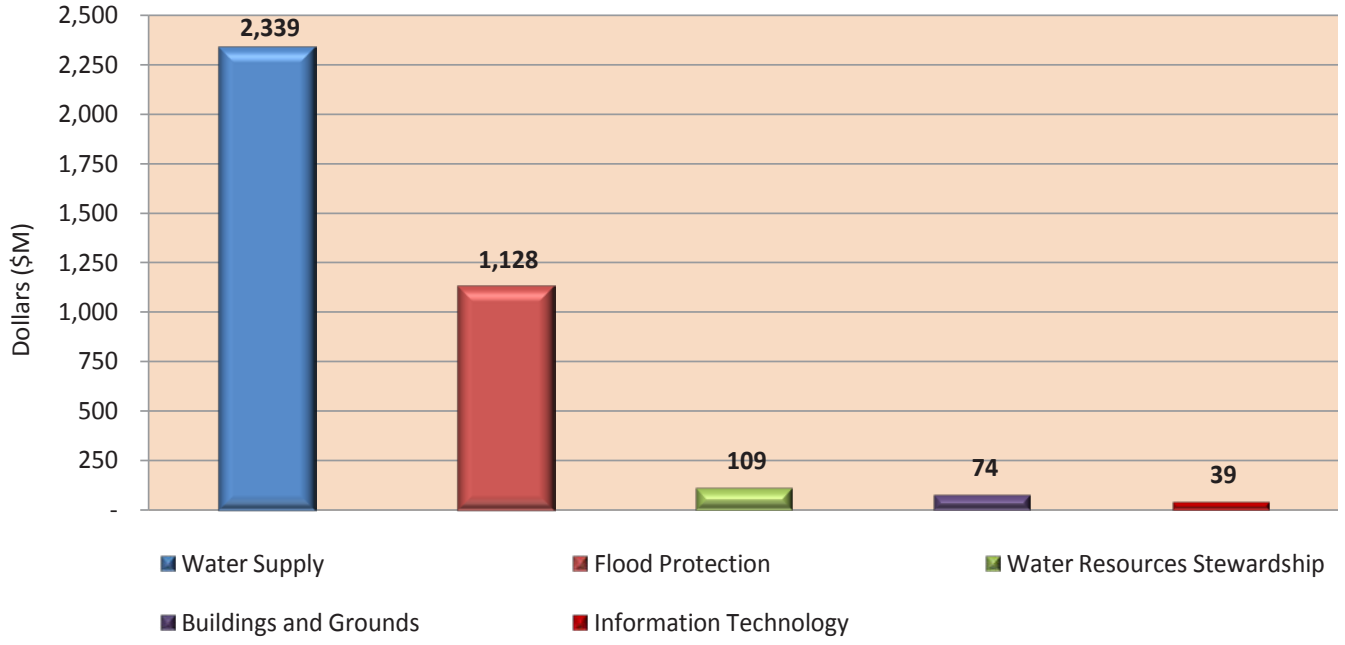
Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Type of Improvement ($K)

	THRU FY15 (Actuals)	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27-31	TOTAL
Water Supply	247,084	142,164	137,160	202,730	347,195	399,688	254,681	132,075	182,411	108,426	113,054	18,847	53,853	2,339,368
Flood Protection	382,523	141,634	211,209	169,585	74,923	37,008	37,044	28,458	21,711	22,995	275	286	328	1,127,979
Water Resources Stewardship	15,340	7,696	8,630	17,350	25,006	11,140	2,490	2,577	2,368	2,463	2,562	2,664	8,534	108,820
Buildings and Grounds	1,295	2,530	15,563	4,695	6,017	9,209	7,191	2,395	2,468	2,544	2,621	2,701	14,797	74,026
Information Technology	2,118	4,411	6,317	2,672	1,093	1,046	1,004	796	3,081	4,615	1,706	970	9,268	39,097
TOTAL	648,360	298,435	378,879	397,032	454,234	458,091	302,410	166,301	212,039	141,043	120,218	25,468	86,780	3,689,290

CIP Expenditures by Type of Improvement

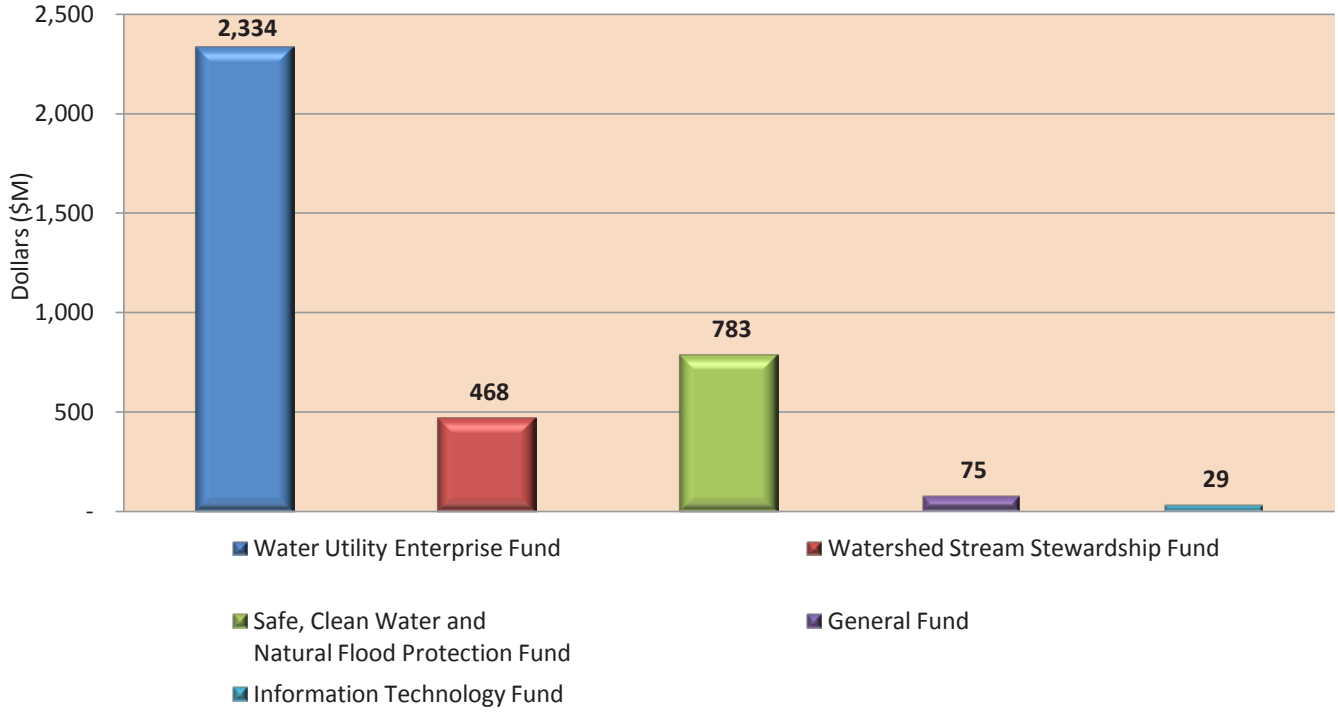


Appendix D - Summary of Capital Expenditures

Expenditure Schedule by Fund ($K)

	THRU FY15 (Actuals)	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27-31	TOTAL
Water Utility Enterprise Fund	248,050	140,883	137,556	192,103	350,999	400,656	255,511	133,042	183,791	112,299	113,829	18,463	47,118	2,334,300
Watershed Stream Stewardship Fund	207,172	37,887	78,980	35,382	30,279	9,649	12,356	16,259	15,789	19,821	854	888	2,845	468,160
Safe, Clean Water and Natural Flood Protection Fund	190,186	112,991	140,655	162,937	66,253	37,698	26,348	13,917	7,500	4,816	2,402	2,772	14,220	782,695
General Fund	2,494	2,530	15,563	4,695	6,017	9,209	7,191	2,395	2,468	2,544	2,621	2,701	14,797	75,225
Information Technology	458	4,144	6,125	1,915	686	880	1,004	688	2,490	1,563	512	644	7,801	28,910
TOTAL	648,360	298,435	378,879	397,032	454,234	458,091	302,410	166,301	212,039	141,043	120,218	25,468	86,780	3,689,290

CIP Expenditures by Fund



Appendix E - Feasibility Studies

Projects listed in the Feasibility Studies appendix are potential future capital projects. Operations staff is collecting data and analyzing alternatives to determine if a capital investment is a cost-effective solution. After completion of a feasibility study, these projects will be validated before they are indentified as capital projects, and considered for addition to the CIP.

Feasibility Studies

Project Name	Water Supply	Flood Protection	Water Resources Stewardship	Buildings & Grounds	Information Technology
Ogier Ponds Separation from Coyote Creek			X		

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Appendix F - Safe Clean Water Project Schedules

The following tabel is an overview schedule for water supply capital projects identified in the FY 2017-21 CIP. Detailed information for each project can be found in this document in their respective chapters in the order presented in this table.

Safe, Clean Water Capital Improvement Project Schedules

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	WATER SUPPLY							
26C40349	IRP2 Additional Line Valves (A3)							
26564001	Main & Madrone Pipelines Restoration (A1)							
	FLOOD PROTECTION							
10244001	Permanente Creek, SF Bay to Foothill Expressway							
26244001	Permanente Creek, SF Bay to Foothill Expressway							
10284007	San Francisquito Creek, SF Bay thru Searsville Dam							
10284008	San Francisquito Creek, Early Implementation							
26284001	San Francisquito Creek, SF Bay thru Searsville Dam (E5)							
26284002	San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)							
26074002	Sunnyvale East and West Channels							
26154001	Guadalupe Rv–Upper, Fish Passage Mods							
26154002	Guadalupe Rv–Upper, I-280 to SPRR (R6)							
26154003	Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)							
26154004	Guadalupe Rv–Upper, Actuals chg to other proj numbers							
26174041	Berryessa Ck, Calaveras-I-680 - Corps							
26174042	Berryessa Ck, Calaveras-I-680 - Reimbursable							
26174043	Coyote Creek, Montague Expressway to Interstate 280							
40324003	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps							
40324005	Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs							
26324001	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)							
26174051	Llagas Creek–Upper, Reimbursable (E6b)							
26174052	Llagas Creek–Upper, Corps Coordination (E6a)							
26174053	Llagas Creek–Upper, Technical Studies							
26174054	Llagas Creek–Upper, Design							
50C40335	Llagas Creek–Upper, R5,6,&7b							

Safe, Clean Water Capital Improvement Project Schedules (cont'd)

Project Number	PROJECT NAME	FY95 - FY99	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	FLOOD PROTECTION (cont'd)							
00044026	San Francisco Bay Shoreline							
62044042	Shoreline Early Implementation							
26444001	San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)							
26444002	San Francisco Bay Shoreline - Other EIAs Planning (E7)							
	WATER RESOURCES STEWARDSHIP							
26044001	Almaden Lake Improvements (D4.1a)							
26164001	Hale Creek Enhancement Pilot Study (D6)							
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)							
26444003	South Bay Salt Ponds Restoration (D8)							

Legend

- Planning Phase
- Design Phase
- Construction Phase
- Close-out Phase

Appendix G - Glossary

Ad Valorem Tax
A tax based on value (e.g., a property tax).

Appropriation
An appropriation is a legal authorization granted by the Santa Clara County Board of Supervisors which allows the District to expend cash and incur obligations for specific purposes. An appropriation is usually limited in amount and the time it may be expended.

Assessment
The process of setting the official valuation of property for taxation; the valuation placed upon property as a result of this process.

Asset
A probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events. Examples of assets are cash, receivables, and equipment.

Benefit Assessment
Determination of the benefits derived from District activities within particular watersheds and levying a proportionate share of taxes to each parcel subject to voter-approved limitations.

Bonds
Bonds are a long-term source of debt that provides a source of borrowed monies that can be used to pay for specific capital facilities. Bonds are a written promise to pay a specified sum of money at a predetermined date or dates in the future, called the maturity date(s), together with periodic interest at a specific rate.

Capital Expenditure
Capital expenditures fall into several categories. In general, they should create assets or extend the useful lives of existing assets. The work product results in a long-term benefit greater than two years and for budgeting purposes involved a major expenditure of district resources greater than $50,000. They can be made with regard to tangible and intangible assets. The general categories of capital expenditures are: rehabilitation, major repairs, improvements/ betterments/ upgrades, replacements, expansions/ additions, and ancillary expenditures.

Capital Projects
Projects are budgeted within the Capital budget and fall within the definition of Capital Expenditures; which means they (1) create or extend the life of an asset, (2) their work products have a useful life of greater than two years, and (3) they involve an expenditure of District resources in excess of $50,000.

Certificates of Participation (COPs)
A security in the general form of a bond, which evidences a proportionate participation in a flow of lease or other payments between two parties.

CEQA
California Environmental Quality Act

CIP
Capital Improvement Program

Cost Center
Cost Centers are separate financial accounting centers in which costs are accumulated because of legal and accounting requirements, the first two digits of a project number identifies the cost center.

DPR
Direct Potable Reuse

DWR
State Department of Water Resources

EIR
Environmental Impact Report

Encumbrances
Commitments related to unperformed (executory) contracts for goods or services. Encumbrances represent the estimated amount of expenditures that will result if unperformed contracts in process are completed.

Appendix G - Glossary

Enterprise Fund
Enterprise Funds are used to account for operations including debt service (a) that are financed and operated in a manner similar to private business, where the intent of the government body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a accounting basis is financed or recovered primarily though user charges; or (b) where the governing body has determined that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control accountability, or other purposes.

Expenditure/Expense
Decreases in net financial resources. Expenditures include current operating expenses requiring the present or future of net current assets, debt service and capital outlays, and intergovernmental grants, entitlements, and shared revenues. The major expenditure categories used by the District are labor and overhead, land and structures, equipment, and debt service.

Facility
Defined as a creek, reservoir, dam, water treatment plant, pipeline, canal, etc.

Fixed Assets
Fixed Assets are defined as long-lived tangible assets such as automobiles, computers and software, furniture, communications equipment, hydrologic equipment, office equipment, and other equipment, with a value of $2,000 or more, or the combined value of like or related units (aggregate value) is greater than $5,000 if the unit value is less than $2,000.

Fiscal Year
A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. The District's fiscal year is July 1 through June 30.

Fund
A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

General Fund
A fund used to account for major operating revenues and expenditures, except for those financial transactions that are required to be accounted for in another fund. General Fund revenues are derived primarily from property and other taxes.

Grants
Contributions or gifts of cash or other assets from another government entity to be used or expended for a specified purpose, activity, or facility.

IPR
Indirect Potable Reuse

Levy
(1. Verb) To impose taxes, special assessments, or service charges for the support of government activities; (2. Noun) The total amount of taxes, special assessments, or service charges imposed by a government agency.

Long-Term Debt
Debt with a maturity date of more than one year after the date of issuance.

One Percent Flood or 100 Year Flood
Has a 1% chance of occuring in a given year. Water District projects are usually designed for the 1% flood, a national standard established by the Federal Emergency Management Agency (FEMA).

Appendix G - Glossary

Operating Expenditure

Operating expenditures are system costs required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services.

Operating expenditures are costs necessary to maintain the systems in good operating condition. This includes the repair and replacement of minor property components. The American Waterworks Association (AWWA) says that these priority components should be smaller than a retirement unit; a retirement unit is a readily separable and separately useful item that is part of a larger assembly. The benefit and life of such repairs should be less than two years. Any repairs that recur on an annual basis are considered operating activities of a maintenance nature.

Operating expenditures are often separated into fixed and variable costs for purposes of understanding operating leverage and structuring service charge rates.

Operations

Expenditures required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services. Operations include work that is generally of an ongoing or recurring nature. Any District work that is not a project is, by definition, an Operation. Operations, although recurring, require close coordination and a high degree of management oversight; however, they can be accomplished without the application of the full range of tools and processes used for managing projects.

Projects

At the Santa Clara Valley Water District, a project is any undertaking which has (1) a beginning and an ending, (2) a one-time occurrence. Projects can require expenditure of capital or operating funds and, at the District, are called Capital or Operating Projects, accordingly. Project usually, but no always, relate to a District facility or facilities (a creek, a reservoir, a dam, a water treatment plant, a pipeline,, etc.). Projects may include studies, design, construction, maintenance, or implementation of systems such as Records Management or Financial Management System.

Revenue

Monies the District receives in exchange for services or sales provided. Revenue items include water sales, property tax revenues, benefit assessment revenues, interest income, intergovernmental reimbursement, and other.

Revenue Bonds

Bonds, whose principal and interest are payable exclusively from earnings of an enterprise fund. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprise fund's property.

Reserve

An account used to indicate that a portion of a fund's assets are legally restricted for a specific purpose and is, therefore, not available for general appropriation.

WTP

Water Treatment Plant

WQL

Water Quality Lab

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